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ABSTRACT

This manual was developed in response to issues and concerns raised in "Directions and Program Policy Proposals" (1984), and in accordance with the Saskatchewan (Canada) School Improvement Program to help meet the need for more and improved monitoring and evaluation at the local school level. It is designed to provide school practitioners with clear-cut and appropriate means for making decisions concerning educational programs at the school and classroom levels. Part 1 provides a general introduction to program evaluation (i.e., what program evaluation is and who does what). Part 2 outlines the steps that must be taken in planning and implementing an evaluation. Part 3 describes most areas of the Saskatchewan school curriculum (kindergarten through grade 12) and some of the programs commonly offered in schools. Part 4 describes specific ways in which a committee or an individual might proceed to evaluate various aspects of the program of a school system. Part 5 contains exapmles of instruments that could be used for data collection and/or in conducting evaluations. Part 6 summarizes some of the evaluation models that are frequently used in educational settings. An appendix provides lists of terms, materials, resources, a 16-item bibliography, and various evaluation instruments. (RLC)

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SCHOOL-BASED PROGRAM EVALUATION MANUAL

Project Coordinator:
J. Orrison Burgess

June 1987

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Faculty of Education, University of Regina, Regina, Sask. S4S 0A2

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SCHOOL-BASED PROGRAM EVALUATION MANUAL

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Prepared for the
Saskatchewan Instructional Development & Research Unit

with funding from the
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June 1987

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J.O.B.

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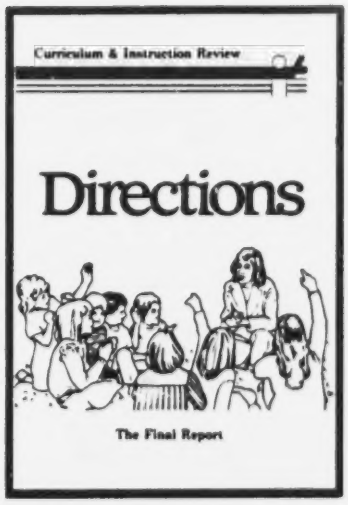
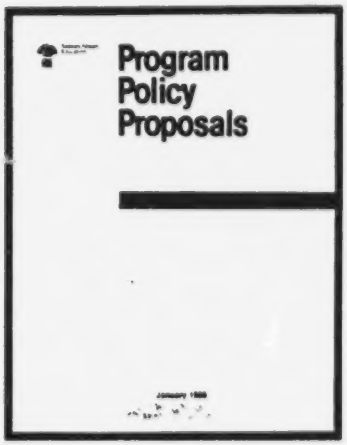
INTRODUCTION

INTRODUCTION





Education in Saskatchewan is facing exciting and challenging times. Never before has there been such a need for continuous, systematic evaluation of what is being done, what might be done, and what needs to be done.

The 7th recommendation of the *Directions* report (1984) is "That the Minister initiate a review of evaluation procedures in the province." This recommendation goes on to suggest future actions. Three of these are:

- "types of evaluation that aid teachers in making decisions about student achievement and needs,"
- "program evaluation procedures at all levels," and
- "indicators of the educational system's ongoing effectiveness."

The curriculum development model proposed by *Directions* places program evaluation as the initial activity in the development process.

The Report of the Core Curriculum Advisory Committee, *Program Policy Proposals* (1986) states that "strategies for evaluating the effects of new programs on student learning will play an important role in determining the effectiveness of a new core curriculum. Many of the processes, skills, and attitudes suggested by the common essential learnings cannot be evaluated with paper and pencil tests. Teachers will need assistance and support in developing strategies appropriate to the new curriculum" (p. 30).

The Saskatchewan School Improvement Program has been established in response to *Directions* recommendations Nos. 4 and 13 that address school environment and collaborative planning processes at the local level. The purpose of the program is to build the capacity for improvement at the school level in order that Saskatchewan schools may put into action the best practices to ensure student learning and success.

Eight essential elements are included in the model established for this program. One of these is **systematic monitoring and**

evaluation. The role of monitoring and evaluation is related to the premise that effective schools have systematic procedures and stategies to monitor and evaluate priorities, programs, students, and teachers. In such schools information is collected in a variety of ways on an ongoing basis, and is then used in decision-making and goal-setting for improvement.

Finally, the Educational Development Fund (EDF) requires evaluation of all projects. Administrative procedures set forth simple and effective guidelines for the conduct of formative and summative evaluations. The application form itself requires a description of indicators of success and methods of evaluation.

Saskatchewan education is becoming more **program evaluation-oriented.** While educators have always been engaged in decision-making, the acceptance of an orientation toward program evaluation as the normal professional stance will enhance program change and improvement. Program evaluation will be seen as ongoing, as long-term, and as an integral part of planning and decision-making for improvement. A knowledge of certain basic program evaluation concepts and methods will greatly assist educators as more and more planning and improvement decisions are called for at the local school level.

THE MISSION OF THIS MANUAL

This Manual has been developed in response to issues and concerns raised in *Directions* and *Program Policy Proposals*, and, in accordance with the Saskatchewan School Improvement Program, to help meet the need for more and better monitoring and evaluation at the local school level. The mission of this Manual is to provide school practitioners with clear-cut and appropriate means with which to make decisions concerning the educational program at the school and classroom level.

AN INTRODUCTION TO THIS MANUAL

This Manual has been designed to assist school personnel — a staff, a committee, or an individual — in conceptualizing evaluation issues. Additionally, it will assist in the **actual** planning, conducting, and reporting of evaluation of some aspect of a school program. It is also intended to assist teachers and principals to work with evaluators who may come to a school division to conduct an evaluation.

An understanding of the content of this Manual should extend one's level of understanding of:

- what program evaluation is, and
- how the results of evaluations can be used to improve programs which are being provided.

Part 1 provides a general introduction to program evaluation: what program evaluation is, and who does what.

Part 2 outlines the steps which must be taken in planning and doing an evaluation.

Part 3 describes most areas of the Saskatchewan school curriculum (K-12) and also some of the programs commonly offered in schools. In each instance the curriculum area or program is described by a Saskatchewan educator. Following each description is a number of evaluation questions which might be considered by a committee or an individual evaluating that curriculum area or program.

Part 4 describes specific ways in which a committee or an individual might proceed to evaluate various aspects of the program of a school system, a school, or a classroom. Following the description are examples of evaluation approaches or instruments which might be used.

Part 5 contains examples of instruments which could be used for data collection and/or in conducting evaluations.

Part 6 summarizes some of the evaluation models which are frequently used in educational settings.

An **Appendix** provides lists of terms, materials, resources and a bibliography.

DEFINITIONS:

— PROGRAM EVALUATION

In this Manual **"program evaluation"** is seen as a **formal process of gathering and analyzing information about some aspect of a school program in order to make a decision, or to communicate the merits of the aspect to other decision-makers or appropriate groups.** Evaluations are usually done with the intention of improvement and follow-up.

— FORMATIVE EVALUATION

Formative evaluation refers to the gathering and using of information **during** the operation of a program or activity. It is an ongoing process and provides feedback for decision-making and change along the way.

— SUMMATIVE EVALUATION

Summative evaluation refers to the gathering and using of information at the **end** of the operation of a program or activity. Summative evaluation provides a final assessment of the effects of a program, curriculum, materials, etc. It leads to a decision (e.g., to continue? to change? to cancel?).

WHAT CAN BE EVALUATED?

The word **program** does not delimit. An evaluation could range from the total program of a school division to a single lesson in a classroom. However, most people using this Manual will not normally be dealing with these extremes. It is more likely that the focus of an evaluation might be upon some of the following:

- how a curriculum area (e.g., social studies or mathematics) is delivered in one or more classrooms or schools
- the specific content (or an aspect of the content) of a single curriculum area
- some aspect of instruction
- an approach to organizing instruction or learners
- materials available and/or used
- objectives which have been established.

In summary, anything planned by a teacher, school or school system is part of program and can be evaluated.

WHAT MIGHT BE THE FOCUS OF AN EVALUATION?

Generally when an evaluation is undertaken the focus is on one (or more) of the following:

- **procedures/processes** — how things operate, or how they are done
- **products** — the result(s) being achieved or secured
- **resources** — the human and/or material resources which are available and are being utilized
- **students** — how they are involved with or related to the aspect of program under consideration
- **staff** — how they are involved with or relate to the aspect of program; may include both instructional and non-instructional staff

KINDS OF EVALUATIONS

There are many kinds of evaluations, which can accomplish many different things. For example, they can:

- measure **goal or objective** attainment
- make **judgements**
- provide **information** for decision-making.

Evaluations may be **formative** and provide a basis for subsequent action, or they may be **summative** and serve as a basis for a final decision or judgment. In addition, evaluations may be:

- **self-evaluations** and/or comparisons to criteria
- an **assessment** of "what is"
- **empirical** or quantitative and favor "hard" data
- **naturalistic** or qualitative and favor "descriptive" data
- **research-like.**

WHAT ARE THE PURPOSES FOR AN EVALUATION?

There are a great many purposes which might initiate an evaluation. For example, there might be a need to:

- determine how to improve something
- identify strengths, weaknesses, current status
- have a vehicle with which to prove a point or to communicate a message
- secure data for the maintenance or justification of something
- have a basis for making immediate or subsequent decisions
- satisfy some requirement (often funds are granted only on the condition that an evaluation be performed).

EVALUATION OF PROGRAM FEATURES

Program features are those aspects of prescribed curricula which, due to their presence or absence, contribute to the success or failure of the curriculum as a whole. In a formal evaluation each feature or curriculum aspect is examined to determine whether it enables the school staff or teacher to do an effective job in the classroom. Such information can be obtained by asking some very basic questions. For example, in the Swift Current "Program Evaluation Guide"* the **features** identified and subsequent evaluation questions are as follows:

* "Program Evaluation Guide," Swift Current School Division 94, unpublished mimeographed document.

Meeting Student Needs:

- Is the program appropriate and relevant to the students' previous learning and development, potential growth, learning style(s), and interests?
- Are there related or additional needs the program could meet?
- Are students' learning problems recognized?

Objectives:

- What is the overall intent of this program?
- Is this clear?
- What specifically has to be learned with respect to content, skills, attitudes and behavior? Are the objectives functional and appropriate?
- Are the aims and objectives recognized and accepted by learners? Are there additional objectives that should be introduced? Should any be deleted?

Scope and Sequence:

- What is the scope of this curriculum?
- What is the sequence?
- Are scope and sequence clearly stated?
- Are they both appropriate?
- Is what is being done in the classroom congruent with both scope and sequence?

Effective Instructional Strategies:

- What teaching strategies are used?
- Are they appropriate? Are they varied?
- Are they consistent with what the curriculum recommends?

Staff Development:

- What provisions are made for staff development?
- Are they appropriate?
- Are they adequate?
- Are personnel comfortable with the program?

Attitudes toward Program:

- How do the various individuals involved with the program feel about it?
- Do students enjoy or appreciate the program?
- How could acceptability be enhanced?

Evidence of Student Learning:

- What formal and informal measures indicate student learning and growth?
- Are measures consistent, congruent, complete, discrete, reliable, efficient?
- How could effectiveness be increased?

Resources:

- What human and material resources are used?
- Are the materials appropriate, varied, unbiased, interesting, comprehensive, accurate?
- Is equipment well utilized?

Logistics:

- Are appropriate facilities available and being used?
- Is time appropriate?
- Are the costs appropriate?
- How could efficiency be improved?

Developing an understanding of the reasons for evaluating and of the types of evaluations will help an individual or group to decide which program features are most in need of scrutiny. In this way an appropriate evaluation **focus** can be determined. This manual should be helpful in assisting individuals and groups in the designing and conducting of evaluations in a manner that is both simple and straightforward.

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PLANNING AND DOING AN EVALUATION

WHAT YOU WILL FIND IN THIS PART

This Part is designed to assist those who might do an evaluation: a school staff, an evaluation committee, a group of teachers, or an individual teacher. The text and examples will be directed to a group setting rather than to an individual teacher. However, the questions to ask and the steps to follow remain the same regardless of how many are involved.

Following a brief introduction and general orientation the Part deals with the following steps:

- planning for evaluation
- describing what is to be evaluated
- stating the purpose of the evaluation
- identifying audiences for the evaluation
- stating issues the evaluation should address
- specifying the objectives of the evaluation
- organizing to evaluate
- collecting the necessary information
- organizing and analyzing the information
- reporting the evaluation results

The next step is to follow the plans which are stated in the proposal. (The rest of this Part provides details on how to go about doing an evaluation.)

Potential Sources of Concern or Resistance to Program Evaluation

Evaluators will have fewer problems if they are aware of and responsive to the concerns of others. The following are often areas of concern which result in resistance:

- concern that the information will be incomplete
- fear that evaluation will judge teacher behavior
- concern that information collected may be abused
- fear that a program may be curtailed or eliminated
- concern that evaluation costs will drain program funds

These concerns and fears can usually be eliminated by providing open access to the proposal and having a communications plan which is deliberate, open, and frequently reports to all those with a stake in the program or its product or results.

THE "ACTUAL" PLANNING AND DOING OF AN EVALUATION

Common Features

Your program evaluation process will have a great deal in common with other evaluations because there are only a few steps or procedures which are used. Also, in systematic evaluations these steps are almost always used and used in the same order. The steps/procedures and order are as follows:

- a clearly stated description of what is to be evaluated — what aspect of program
- the purpose of the evaluation — why evaluate
- objectives of the evaluation — specified goals and/or effects
- organizing to evaluate — what needs to be readied
- data collection — what data and which instuments
- organizing and analyzing the data — what has been found out
- reporting and follow-up of the evaluation

Basic "Rules"

There are also some basic "rules" in program evaluation. In 1977, the Saskatoon Board of Education distributed these rules to follow when engaged in program evaluation:

- To be thorough and to be credible, evaluation should encompass the process as well as the outcomes of a program.
- Instruments used should be matched carefully to specific program objectives.
- More than one instrument should be used for each program objective.
- Evaluation should include as many of the program objectives as possible, not just one.
- The people in the program should be consulted and involved in planning and conducting the evaluation.
- If evaluation is to be respected, it must provide information useful to people in the program.
- Adequate time and money should be provided for the type and amount of evaluation needed.
- Multiple instruments should be used to measure all feasible program goals.
- Technical procedures should be used to facilitate more economical and more thorough evaluation.
- All evaluators need outside assistance occasionally and should seek it when appropriate.
- Evaluation plans should be designed in accordance with the time and resources available.

HOW CAN THE PROGRAM BE DESCRIBED?

It is essential that a program description be written at the outset of the planning process. This description will likely include a rationale for the program, program goals and objectives, intended program recipients, program staff, program activities and materials, and program costs.

The purpose of this description is to establish a clear framework for evaluation questions and activities. The evaluation process itself should be streamlined as much as possible, with questions and information collection activities direct and to the point. Setting a framework such as this will help keep questions from meandering away from the evaluation purpose, as well as serving as a "prop" to make sure no important questions or issues are neglected.

Many people find it helpful to complete forms such as those which follow when they are engaged in specifying what it is that is to be evaluated.

What is to be evaluated?

	NO	YES	PARTIALLY	NOT SURE
- Is it a part of the school program at the school division level?	____	____	____	____
- Is it an aspect of the program of more than one school?	____	____	____	____
of only one school?	____	____	____	____
of more than one grade?	____	____	____	____
of more than one classroom?	____	____	____	____
of only one classroom?	____	____	____	____
- Is it a curriculum area?	____	____	____	____
- Is it some aspect of instruction?	____	____	____	____
if YES or PARTIALLY, are teachers the primary personnel?	____	____	____	____
or is it primarily students?	____	____	____	____
or both?	____	____	____	____
- Is it materials?	____	____	____	____
if YES, what type? ____				
- Is it some other aspect of program?	____	____	____	____
can you describe it or name it?	____	____	____	____
- (add any other questions which will help identify what is to be evaluated)	____	____	____	____

The specific object of the evaluation is _____

_____

_____

_____

(transfer this to the next worksheet)

Describing the Specific Object of the Evaluation

The object from the previous page.	
Describe where it exists. (division, school, classroom?)	
How long has it been a part of the school's program?	
Who is currently working with/in this program?	
What are its objectives?	
Describe how it operates, or performs, or is used.	

WHAT IS THE PURPOSE OF THE EVALUATION?

What aspects of the program are in need of evaluation? In order for an evaluation to be successful, it must concentrate on significant questions. The process of question formulation should be given ample time, as the truly meaningful questions may emerge only after some deliberation. Some experts recommend using a brainstorming session in which individuals write down all ideas as they occur, and then **rank** them in order of importance.

Questions somewhat like the following should help to focus the purpose of the evaluation:

- Are we evaluating as the result of a needs assessment?
- Have there been some questions or criticisms raised about this aspect of the program?
- Has it been in operation for a long time? Is current relevance an issue?
- Is the evaluation necessary to secure funding of some sort?
- Is it desirable to prove something?
- Might an evaluation help in improving something?
- or any one of the"purposes" listed on page 1.4

Write the Purpose of the evaluation in one paragraph. (1-4 sentences should be sufficient.)

CROSS CHECK

In Part 3 curriculum areas and programs are described. Many of these descriptions may suggest a "Purpose" for doing an evaluation.

In Part 4 there are examples of evaluation approaches. Some of these approaches could satisfy a "purpose," e.g., evaluating goals (p. 4.3), evaluating a curriculum (p. 4.5), comparing two programs (p. 4.8), selecting a textbook series (p. 4.14).

In Part 6 there are evaluation models which have a particular function. Some of these models would be appropriate for certain "purposes," e.g., evaluating objectives (p. 6.2), needs assessment (p. 6.5), evaluating intentions (p. 6.12).

HOW ARE ISSUES AND OBJECTIVES OF THE EVALUATION DETERMINED?

Usually the audiences (stakeholders) of the program are identified. These might be other teachers, parents, students, etc. The evaluators either list what the issues/concerns of the audiences might be from their own knowledge or they conduct interviews with key or representative informants. *(Completing a form somewhat like the one on the next page should identify audiences and the issues of the evaluation.)*

Basic program goals/objectives will also identify issues for the evaluation.

All of the issues identified will provide the basis for determining the objectives of the evaluation. Each issue then becomes the basis for the objectives of the evaluation (what the evaluation will find out) or the questions of the evaluation (what answers must be provided by the evaluation).

Refer to Part 3 for examples of Evaluation questions. When stating a question resist asking questions which can be answered "Yes" or "No". Instead of beginning a question with "Are" or "Does" or "Is" use phrases such as "To what extent are ...", "To what degree does ...", "How adequate is ...", "In what ways ...", "How have ...", or "What ...", etc.

An Example*

Consider an evaluation of a school program which seeks to improve the academic achievement of certain disadvantaged children. One issue or objective which might emerge could be the academic performance of children in the program. Associated with this objective are a series of questions such as:

- What is the grade level of performance of children in the program with respect to reading, mathematics, etc.?
- Is the performance similar for all children or are there differences which are explainable in terms of the child's background?
- Do children increase in their performance uniformly, or are there thresholds and plateaus to the academic performance of the child?

Associated with each question are one or more indicators. These indicators may be items on key informant interviews or specific questions on a survey. (See page 2.19)

For example, in the first question above, indicators might consist of direct evidence from school transcripts, interviews with teachers, interviews with parents, etc. It is common for each question to have more than one indicator.

* Adapted from materials developed by Dr. Greg Mason, University of Manitoba Research Limited — used with permission.

WHO WILL BE INTERESTED? (WHAT AUDIENCES?)

	IN WHAT WAY	ABOUT WHICH ISSUES
IN THE DIVISION?		
IN THE SCHOOL(S)?		
IN THE CLASSROOM(S)?		
IN THE COMMUNITY?		
BEYOND THE COMMUNITY?		

The evaluation framework then consists of a tree structure in which issues branch into questions and questions into indicators. This can be represented as a table.

Evaluation Framework

Evaluation Issues	Evaluation Questions	Indicators
1. Academic Performance	a. How have marks changed?	a. Scores on tests
		b. Teacher survey
		c. Parent Survey
	b. Have all children benefited?	a. Scores on tests
		b. Teacher Survey
		c. Parent Survey
	c. Has the change been uniform?	a. Test scores over time
2. Behavior	a. How have children's behavior changed toward: - school - family - friends	a. Parent Survey b. Teacher Survey

Note: This schedule would continue through all issues.

CROSS CHECK

Reference to Part 3 will indicate examples of "evaluation questions" which might be asked concerning every curriculum area and programs normally found in Saskatchewan schools.

HOW DO WE ORGANIZE TO DO THE EVALUATION?

It may be necessary to have an evaluation team or an evaluation committee. It must be decided whether the team will do all the work or whether there are to be subcommittees, task groups, etc. It is also necessary to determine to whom the evaluation team will report. Usually we refer to this person or group as the "client." This differentiates who it was who wanted the evaluation from those who are doing the evaluation. Of course, often this separation will not exist or be necessary.

Regardless of the work group structure or format, those responsible for the evaluation should initially do the following:

- clarify the purpose of the evaluation (see **Description** and **Purpose** sections — Steps 1 and 2)
- determine who needs the results of the evaluation (also consider the reporting format/procedures which might be utilized)
- decide if there are any important or sensitive issues for which special attention is needed
- determine what resources are needed or are available for the evaluation
- consider resource issues:
  - personnel — who is available and/or are they to be external?
  - time — part of, or in addition to job assignment?
  - funds — what will this cost (see p. 2.4) and do we have the funds?
  - are data collection approaches and instruments available?
  - in-service needed — for ourselves, for others?
  - what data are available — readily, by search, or by collection?

(A form like the following may help deal with these resource considerations.)

RESOURCES

ITEM	CHECK AVAILABLE	CHECK NEEDED	HOW USED?

etc.

The team/committee

Unless there is a single evaluator, the leader leads the group which is referred to as a team or committee. Many will be on the team because they possess important knowledge or skills which are necessary (e.g., a data collector); for others the only trait they possess might be that of interest.

A small eager work group is usually necessary and is usually more desirable than a single individual or a group which numbers more than six. Consideration needs to be given to how team members are identified — is it by appointment, election, or the offer to volunteer; is the team to be representative of interests (administrators, teachers, support staff, students, parents, board members)?

Each instance is unique so it is impossible to provide specific advice with respect to whom to have on a team. Experience indicates that a team needs people who can assist in management because they possess skills in

- supervising
- communicating
- budgeting
- goal setting
- human relations

or who bring technical competence because of skills in

- instrument selecting
- data analysis
- survey techniques
- information processing (computer skills)
- report writing

Consideration and tasks

With the evaluator and team in place it is now possible to look at some concerns which have likely been generated by performing the tasks of program description (pp. 2.7-2.11), determining the purpose of the evaluation (p. 2.13), stating issues, identifying audiences, and determining objectives (pp. 2.11-2.17). These concerns can be assigned to members of the evaluation team to review and report back to the team concerning their state of clarity, completeness, and importance.

The team (or members of it) should determine if a needs assessment needs to be completed before the evaluation begins. (See pp. 6.7-6.10 for a description of how to conduct a needs assessment; on pp. 4.67-4.70 there is an example of a needs assessment for Grade 10 Science.)

A determination needs to be made of the level of management skills and technical competence skills possessed by the team. Is there a need for training in any of the skills listed at the end of the previous section? If such training is necessary it should be scheduled and provided.

A good management plan **charts the activities** needed to implement the evaluation, **schedules these activities**, and **determines responsibilities** for the activities.

EVALUATION WORK PLAN

Evaluative Questions or Objectives	Information Required	Source of Information	Method for Collecting Information	Information Collection Arrangements			Analysis of Information	Reporting Information		
				By Whom	Conditions	When		To Whom	How	When

TWO EXAMPLES OF AN EVALUATION WORK PLAN
MATHEMATICS AND SCHOOL RULES

Evaluative Questions or Objectives	Information Required	Source of Information	Method for Collecting Information
How well do teachers at the various grade levels feel the current math program meets the needs of their students in general, as well as those with varying abilities?	Teacher's attitudes toward math program in meeting students' needs	All math teachers	Teacher survey/ questionnaire (ALL)
HOW WELL ARE SCHOOL RULES UNDERSTOOD AND APPLIED?	-KNOWLEDGE OF RULES -EXISTING PRACTICES -ATTITUDES TOWARD RULES	-STUDENTS -TEACHERS -SUPPORT STAFF -POLICY STATEMENTS -INCIDENTAL REPORTS	-QUESTIONNAIRE -INTERVIEWS -DOCUMENT REVIEW -MEETINGS

Information Collection Arrangements			Analysis of Information	Reporting Information		
By Whom	Conditions	When		To Whom	How	When
By evaluation team	On site	Feb. 15, 198-	Descriptive analysis	Students by grade by ability	Written report	April 1, 198-
BY EVALUATION TEAM	OBSERVE CONFIDENTIALITY	SEPT/OCT.	CONTENT ANALYSIS	TEACHERS SUPPORT STAFF PARENTS BOARD	MEETING MEETING PUBLIC MEETING REPORT	NOV 15-22

HOW SHOULD THE NECESSARY INFORMATION BE COLLECTED?

Sources

There are many appropriate sources from which to collect data to evaluate educational programs.

Some are printed:

- curriculum guides
- texts
- teacher resources
- learner materials

Some are documentary:

- test results
- records
- minutes
- regulations
- policy statements

Some are human:

- learners
- teachers
- administrators
- parents
- trustees

Many more could be listed but these indicate the variety and range of data sources.

Cautions

It is important to identify two cautions:

a. can the information be secured without breaking the confidentiality of the source?

a. is it ethical for the collector to use the information without the permission of the source?

How much information is enough? Is too much?

How much/How many? Ideally an evaluation team might want to deal with all the test scores, use all the students' work, interview all the teachers, survey all the counsellors, etc. — and that would be perfect. It is more realistic to obtain samples from the information sources. The evaluator has to decide whether all the people involved should be included or only some of them. All the texts, or resource materials, or test results, or opinions; or a representative sample? Although there are no absolute rules which **always** apply, the following guidelines will usually be appropriate:

- a sample of 100% if the total is less than 20
- a sample of 80% if the numbers are between 20-100
- never less than 50% of the total number possible unless the number is in the 100's.

It is important to realize that the size of the sample may have an impact on the accuracy of the data. When the data includes all the possible scores, interviews, materials, etc., the subsequent analysis will be more accurate than if only a proportion of the possible scores, etc., are included.

Go back to the worksheet (2.25) and fill in the columns to indicate:

- the information required
- where this information will come from — the source
- how the information will be collected.

CROSS-CHECK

The strengths and limitations of the more common data collection approaches are indicated on pages 5.5-5.9 of Part 5.

Suggestions for developing and using some common data collection approaches are found on pages 5.10-5.38.

Almost all of the approaches in Part 4 — Evaluation Approaches, provide examples of data collection instruments. Refer to the Table of Contents on page 4.2 for approaches to evaluating aspects of program.

HOW DOES THE EVALUATION TEAM ORGANIZE AND ANALYZE THE INFORMATION/DATA WHICH HAVE BEEN COLLECTED?

Analysis is the process of finding out what the collected information actually means. Analysis involves working with the data that have been collected to determine what conclusion these data support and how much support they provide for, or against, any conclusion. The purpose of analysis is to summarize from the information the message(s) it contains in order to make tentative conclusions or decisions.

Organizing

Attempt to summarize and/or detect patterns. If a simple, self-evident or easily explained analysis is possible, provide it without any delay. Try to put results into a context or some frame of reference; for example, a time or chronological pattern, a compare/contrast presentation, a "before and after" presentation.

Stages of the Analysis

Often this simple single approach can't be done; in any case, most analysis is done in stages. First the information is coded or organized so that some sense can be made of it. Then the evaluators, using common sense and experience, decide what analysis would be helpful and what kind of analysis might answer questions such as:

- What did we find?
- What do the data show us?
- What does it mean?
- What conclusions can we draw from the data?
- What recommendations appear likely?
- What alternatives should be considered?
- What additional questions should be asked?
- What factors should be discussed?

A more detailed analysis, while still preliminary, might entail basic statistics.

A secondary analysis using more sophisticated methods might be in order. (Some references about statistics are in the Appendix.) You may wish to use a computer or you may need an outsider to help, but both of these resources are present in almost every community. You can use these resources to calculate means, standard deviations, correlations, test of significance, et cetera.

Don't forget that all analysis is not necessarily involved with **quantitative** manipulation. Much data collection and analysis is of a **qualitative** nature — data telling how it "feels", what it is like, what people think, etc. about the program being evaluated.

HOW ARE EVALUATION RESULTS REPORTED?

The information has been collected and analyzed. Now what? The evaluation findings need to be communicated to others.

At this point in the evaluation your evaluation team probably understands the circumstances of your evaluation inside and out. However, that is not enough — particularly if changes are to occur as a result of the evaluation. The history of program evaluation has been plagued by the non-use of evaluation findings because they were not adequately communicated to others.

The purpose of reporting: communication

Communication is the key word to remember in reporting. The final report should contain enough information to tell another person exactly how the evaluation was done, what was found out, and what recommendations were made.

Who gets a report? of what type?

The evaluation audiences identified earlier (p. 2.15) must be informed of the results of the evaluation. What is needed may range from a brief summary given to parents, to an extensive **detailed account** to be kept for the school records. You might decide to send a somewhat **abbreviated version** to the board or district office.

The type of report and the content of the report should vary in those ways which are most appropriate for the audiences' needs and your purposes. You might report by means of

announcements
press conference or release
newspaper or magazine article
formal reports
interim or preliminary reports
main reports
technical report
executive summary
meetings and discussions
hearings, panels, presentations
direct mailings
memoranda, letters
audio-visual presentations

Communicating to others

It is important to remember that your school does not exist in total isolation, and that conditions of the same sort will likely arise in other schools. Your sharing of the evaluation process and results may be of tremendous assistance to others in trying to tackle similar problems.

If it is a written report, what should it be like?

The format and timing of reports will vary according to:

a. audience needs
b. type of evaluation and
c. evaluation purpose(s)

However, with only a few exceptions, all reports will need to contain the following:

1. **Introduction:** a quick lead-in that explains program purposes (and perhaps origins), types of program participants, and reasons for evaluating.

A few more guidelines for report writing

1. **Be efficient.** Don't save the entire writing job until after all data have been gathered and analyzed. Write two sections of the report during the planning phase. These are the program description and the description of the evaluation study. Both of these are essential to the conduct of a successful evaluation, and having a clearly written statement in hand during the evaluation process will help evaluators stay within the evaluation framework.

2. **Be tactful.** At the school level this is essential because all staff will continue working together once the evaluation process has been completed. There is no point in accidentally antagonizing colleagues through careless presentation of evaluation results. The use of tact will also create an environment that is more receptive to evaluation results.

3. **Be ethical.** An evaluation will provide information not only on strengths and weaknesses of a program, but also (especially at the school level) on the strengths and weaknesses of individuals. It is important to respect the privacy of others. Data of a personal nature should be kept confidential and made available only to those individuals directly involved. If reports are intended for use outside the school, it might be a good idea to change the names of people and schools involved.

4. **Be concise.** Results must be expressed in clear language that can be understood by the average reader. If statistical tables add to the impact of the report, they may be included in the Appendices. Do use bar and line graphs to help explain results in the body of the report. Likewise, supplementary materials such as anecdotes or work samples may be used to help explain or support evaluation findings.

IN CONCLUSION

Although evaluations take a variety of forms and use a variety of techniques, there are relatively few steps to follow. The decisions which are made with respect to these steps will determine how successful and useful the evaluation will be.

1st: **DETERMINE THE PURPOSE OF THE EVALUATION**

2nd: **CLEARLY IDENTIFY WHAT IS TO BE EVALUATED**

3rd: **COLLECT THE NECESSARY DATA**

4th: **ANALYZE THE DATA**

5th: **REPORT THE RESULTS**

3

CURRICULUM AREAS AND PROGRAMS

In this Part there is a description of each curriculum area in the Saskatchewan school program and evaluation questions which might be asked about each area.

Many of the programs currently offered in Saskatchewan School Divisions are also briefly described and evaluation questions are posed for each of these programs.

The descriptions have been written by people who are knowledgeable about Saskatchewan education. The views expressed in the descriptions reflect the opinions of the writers themselves, and do not necessarily represent the views of the editor of this manual, the Department of Education, or the writer's employing institution or school division. Likewise, the evaluation questions represent issues which are concerns of the writers. They were asked to indicate evaluation questions which might be asked if one were to do a school-based evaluation of a curriculum area or an educational program. Some areas/programs have been omitted. These omissions are due to a variety of factors, some of which are: writers could not be identified, submissions were not available by the printing deadline, programs were felt to be present in so few Divisions that they did not warrant inclusion, et cetera.

NO ONE WOULD NORMALLY READ ALL OF THIS PART IN ANY ONE READING; it is more likely that a staff, or an evaluation committee, or an individual would turn to those areas and programs which are of particular interest.

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ARTS EDUCATION

(Paul Rezansoff, Fine Arts Department, Swift Current Comprehensive High School)

Fine Arts programming in Saskatchewan schools has historically included up to four areas of study: art, music, drama, and dance. Art and music are the most common, while drama and dance tend to be offered on a much more limited basis; very often depending on the availability of a qualified teacher and the suitability of facilities for providing the program. Course offerings in the area of the fine arts have tended to be very much studio or performance based, and the learning which has taken place is of the creative or productive mode.

In 1976, the Minister of Education began a process of examining the role of fine arts programming in Saskatchewan schools. In 1978, the Minister's Advisory Committee on Fine Arts Education presented an *Interim Report* which presented a rationale for the expansion of the role of the fine arts in Saskatchewan schools. On completion of its *Final Report* in 1981, the committee put forth recommendations and a plan of action which provides for fine arts programming in Saskatchewan schools to be composed of four strands of study—art, music, drama and dance; and that offerings be expanded to include three modes of learning—the creative or productive, the responsive or critical, and the historical and cultural.

With the recommendations presented by the *Directions* report (1985) which provides for a further expansion of the role of the fine arts in Saskatchewan schools, and with the appointment, in 1986, of another Minister's Advisory Committee on Fine Arts Education, it is evident that the place of the arts in our schools will be much strengthened and more emphasized in the future.

Evaluation Questions

1. To what extent is the program offered to your students a performance or activity oriented program?

2. Does the program provide opportunities for students to expand their horizons in the areas of study?

3. How does the arts education program provide for the needs of students as potential consumers as well as performers or producers of the arts?

4. Is the program accessible to all students and do students feel comfortable with the orientation of the program?

5. To what degree do the teachers of arts education feel competent to provide the program of instruction?

6. What provisions are made available for professional staff development?

7. How adequate are the resources and equipment which are necessary to be able to offer a diversified program? a total program?

8. To what extent are community resources and programs used to enrich the program?

BUSINESS EDUCATION

(Dr. Cyril Kesten, Faculty of Education, University of Regina)

Business Education, as it is taught in high schools in Saskatchewan, reflects the typical two pronged approach. The two areas of Business Education are (a) the office education area and (b) the basic business or socio-business area. As well, the offerings in these areas reflect the two major purposes of Business Education: education for business and education about business.

The office education area deals mainly with classes such as Office Procedures, Typing, Shorthand, and more recently, Word Processing, Information Systems, etc. This area has seen profound changes with the increased availability, power, and user friendliness of personal computers and word processors. As well, the computer revolution has created a much more competitive atmosphere in the schools for 'ownership' of certain areas of content.

It is these changes that demands further exploration, investigation, and evaluation of programs in this area of business education. Studies such as the following could realistically be done to measure and evaluate the effect of these changes:

1. How well have Business Education teachers adapted to new curricula and instructional strategies, as well as new pressures and tensions in the staff room?

2. What kind of curriculum is needed by workers, consumers, and citizens, and how does this match with the current curricula, textbooks, and student orientations?

3. As new curricula are being developed, how well are they being implemented, and how are they changing the nature and orientation of this area of the Business Education program?

4. How well does the philosophy and approach of the Business Education department or staff fit in with the philosophy and approach of the school and the school division?

5. What is the process, and how well does the process work, for identifying the need for new equipment and the method of ordering, checking, and using new equipment?

6. What are the attitudes, accomplishments, and needs of both the students in the Business Education program and those who do not take Business Education subjects in relation to the content of this area of Business Education?

The basic business area includes courses such as Accounting, Economics, Law, Consumer Education, etc. This area can be studied in much the same manner as described above. Some areas of concern particular to this area would be:

1. What effect, if any, is there on curriculum, student attitude, teacher attitude, parents, instructional strategies, etc. when these subjects are the sole 'property' of the Business Education Department? The Social Studies Department? A shared arrangement? No department?

2. How are materials which are Saskatchewan-based and oriented used, developed and evaluated?

CHRISTIAN ETHICS/RELIGIOUS EDUCATION

(Fr. Ron Beechinor, St. Paul's Roman Catholic School Division, Saskatoon)

Religious education in Saskatchewan is formalized in two programs. For Divisions I, II, and III, the most commonly used program in Roman Catholic schools is the *Canadian Catechism.* For high school students, the most common program is the *Division IV Christian Ethics Curriculum* which is approved by the Department of Education.

The *Canadian Catechism* is a program that involves the student as a Christian person at his/her age in the religious and daily situations of life. While the teaching of religious knowledge is an important objective of this program, the major emphasis is on the experiential approach to the teaching of religion. This stems from the realization that while it is important to know about faith, it is more important to *live* faith.

The *Canadian Catechism* is rich in its presentation of Scripture, in doctrinal understanding, in religious music, prayer, the Christian meaning of life, Liturgical worship, and appreciation of Sacraments and Grace. The program also helps the child to become aware of moral goodness. The child is encouraged to assume responsibility for his/her moral decisions and actions. Again, the emphasis is based on the principle that the child cannot learn moral goodness simply by being told about it. The child has to experience it in his/her own life. Consequently, one of the outstanding characteristics of the *Canadian Catechism* is its particular application of the understanding of the psychological development of children. The authors of this program developed the religious program in a manner that is best suited to the gradual human development and changing needs of the child at various age levels.

The *Division IV Christian Ethics Curriculum* is much more content-oriented than is the elementary program. While the experiential-discovery approach is used in the Division IV curriculum, it is less obvious. This curriculum is very scripturally-oriented and attempts to apply the message of scripture to contemporary life, its goodness and its problems. It is a curriculum that was developed with the realization that for many students this would be their last opportunity to study Christian ethics in a formalized manner. Therefore, it does attempt to provide a general blueprint for Christian living, and attempts to provide the students with effective tools for decision making.

In the Division IV curriculum there are four major areas of concentration — Good and Human Kind, The Christ in Scripture, The Contemporary Christian Community, and The Christian: A Person For Others. This curriculum also recognizes that religious instruction is not sufficient to itself. It presupposes a Liturgy and a Sacramental life adopted to the realities of our time. It demands expression in social action and the apostolate. It presupposes most emphatically a community of faith in which one finds and lives the authentic spirit of the Gospel.

I would suggest the following questions could be asked about the curriculum area, if it were to be evaluated:

1. Is the curriculum content based on valid assumptions about current information regarding Christian thought and practice? How has the content been selected and organized? Is the scope, sequence, and balance of objectives logical and defensible?

2. Does the curriculum include an appropriate balance of various learning outcomes, i.e., knowledge, skills, and attitudes? Did the development process involve a variety of expertise — teachers, parents, students, et cetera?

3. What assumptions are made about the prerequisite knowledge and/or beliefs of students?

4. Is the curriculum guide presented in a clear, coherent, and useful format?

COMMUNITY SCHOOL PROGRAMS

(Mrs. Gwen Keith, Supervisor of Pupil Personnel, Regina Catholic Schools)

The Community School Program in Saskatchewan, totally funded by the provincial government, is a program developed to serve the needs of elementary school inner city poor, Indian, and Metis students. The close linking of a child's home with school is assumed to have positive results in student progress in school.

This program focuses on increased parental involvement at school through additional child and adult programs and council opportunities. Increased school staff in the form of teacher associates and coordinators reduces the pupil-adult ratio in the school and attempts to create a more positive, culturally relevant focus at school that extends to the community. Extensive efforts are put forth to work with multi-growth families. Additional funding given to community school staff and their community provides money to enrich the curriculum and allow for opportunities not usually available in the inner city.

Community School programs have been located in Prince Albert, Saskatoon, and Regina since 1980. Program evaluation results point toward increased student attendance and more involvement of Indian and Metis parents at school, as well as considerably more relevant programs for community members. While Community School programs have been extensively evaluated at school division and provincial levels, there are several questions that require more clarified answers.

1. How do practitioners define community schools?

2. What are the attitudes of community school practitioners toward program evaluation after several attempts at working in the area?

3. What Community School objectives should receive top priority in evaluation (e.g., student-based vs. community-based)?

4. How long should a Community School program be in operation before academic progress of students is measured?

5. What are the most appropriate instruments to use to measure student achievement in multi-cultural settings?

6. How can the community become actively involved in Community School program evaluation?

7. What evaluation process will provide the most credible documentation of Community School programming?

COMPUTER EDUCATION

(Dr. Ron Richmond, Faculty of Education, University of Regina)

The various roles of the computer in schools can be described under the terms tool, tutor, and tutee. This three-part categorization emphasizes the idea that computers in education must be approached from a variety of perspectives and their use evaluated by differing expectations at different times and places.

The computer as a tool represents the most widespread and appropriate view of the computer in society. Learning about computers — what they are, how they work, their role in society, their relevance to career preparation — is the core of Computer Literacy. In Saskatchewan, teachers are encouraged to introduce students to computers informally in Divisions I and II, to continue the program more formally through the Computer Literacy course in Division III, and to extend these learnings based on practical applications to life in the Division IV Computer Applications courses. These opportunities are targeted at all students, with only the Division IV courses considered to be optional.

The emphasis on Computer Literacy, as defined above, reflects a philosophy of equitable opportunity for all students to become knowledgeable about and skillful in the use of computers. Where socio-economic conditions tend to introduce disparity, the school is committed to equalizing opportunity to inform and equip students for the technological future. The emphasis upon the computer as a tool includes an emphasis on the computer as an object of study.

The tutor-role of the computer is currently emerging on the educational scene without either a great deal of educational planning or clearly defined expectations. Its ability to provide rich instructional experiences to students is only beginning to be appreciated. Educators are learning to recognize, however, that different styles of teaching/learning are possible: drill and practice, tutorials, simulations, educational games. To date, the computer as tutor is in its infancy: program quality is improving and student information management is starting to become available. Major developments in this area are still before us as computer systems which are especially designed for schools become available with full management systems and fully developed courses of study. The term 'lessonware' more correctly characterizes current software because programs typically exist in isolated, small units, unrelated to a comprehensive overall plan as one expects to find in quality 'courseware.'

The primary concern of educators with the computer as tutor is the idea that computers will 'program' children and that, relatively speaking, children are passive receptors of information presented by an automaton. This criticism is only partially valid. Some software in this category allows teachers and students to create their own lessons. Further, use of the computer can often complement other classroom learning experiences; for instance, students often appreciate the 'infinite patience' and 'individualized feedback' of the computer as they struggle to master a concept or skill. The computer as tutor needs to take its place along with other learning aids in the classroom and be recognized as a highly interactive learning environment when contrasted with many other forms of instruction.

The computer as tutee is often overlooked by educators. Children can learn to 'teach' a computer. That is, they learn to provide instructions to a computer in the form of immediately executable commands or in the form of a stored set of instructions called a program. The Logo language, with the popular 'turtle graphics,' has been designed especially for children. Using pictoral images, even young children can design and plan for the creation of unique patterns and scenes to be displayed on the computer screen or printed on paper. This form of activity can be highly divergent in nature, allowing individuality to develop and be rewarded. More importantly, it encourages 'procedural thinking,' a generic skill that is thought to be of

(Joanne McCabe, School Effectiveness Coordinator, Swift Current School Division)

The aim of a Core French program is not to develop grammarians, but to develop competent language users — as competent as possible within the time available. The Saskatchewan Core French Curriculum requires mastery of relatively few structures. Rather the focus is on language acquisition and use.

While the intent of the Core French program is not to produce a bilingual graduate, it should meet the following objectives. The student should:

- have a basic knowledge of the oral and written aspects of the target language. The student can build on this base later in life if he/she has the need or the desire to do so;
- acquire a better knowledge of his/her own language (English), its structure and vocabulary, because much of the grammar is common and many English words come from Latin or French roots;
- have access to the thought and literature of other linguistic groups;
- learn to accept the fact that other ways of expressing thoughts and doing things are equally valid and acceptable.

Specifically, the Saskatchewan Core French Curriculum sets out the following objectives for all levels:

(a) ATTITUDINAL/CULTURAL OBJECTIVES

By the end of the Core French Program, the student should:

- be aware of the role language serves in developing a good understanding of cross-cultural relationships in Canada and the world;
- derive a degree of satisfaction from the experience of studying French which should result in a continuing involvement with the French language and French speaking people outside the classroom and beyond the school curriculum;
- recognize the influence and contribution of French language and culture to Canadian and world civilization and to the arts;
- have developed a desire to learn about French speaking people in various parts of the world.

(b) LINGUISTIC OBJECTIVES

By the end of the French Program, the student should:

- be able to understand the spoken language within the range determined by the student's linguistic experiences and areas of interest; LISTENING;
- be able to participate in conversations, free from major vocabulary, grammatical, and pronunciation errors, within the student's linguistic experiences and areas of interest; SPEAKING;

CROSS-CULTURAL EDUCATION

(Sherry Farrell-Racette, SUNTEP, Gabriel Dumont Institute of Native Studies and Applied Research, Regina)

Cross-cultural education, as a subject area, is offered at the University of Saskatchewan with classes at the undergraduate and graduate level. At the University of Regina, a two class sequence is offered, which to-date (1987) has been available for SUNTEP students only.

The way cross-cultural education manifests itself in schools throughout the province is through inservice education for teachers; these programs are primarily 'cross-cultural awareness' in focus. Some large city schools outside Saskatchewan (Toronto, Vancouver) have used the work of the American researchers, James Banks and Geneva Gay, and Canadian researcher Jack Kehoe, in working to improve the cross-cultural climate of their schools. Some means of evaluation of climate have been developed and used.

In Saskatchewan, cross-cultural education is of two types: (1) cultural-specific studies, which are studies of particular cultural groups (example: Indian Studies courses; other cultural groups are developing studies specific to their culture); (2) general, or vaguely defined multicultural approaches. These tend to be largely extracurricular in nature, although there has been some application in subject area classes.

Indian Studies is more developed in Saskatchewan. There are currently three Indian Studies courses being developed by the Department of Education for Division IV. Previously a school or division wishing to offer such courses was required to develop the course and then apply to the Department of Education for accreditation. The Indian Studies 10, 20 and 30 will have approval from the Department and in some cases may be used as variable credit for existing Social Studies courses.

It is still possible for locally developed courses to be accredited by the Department of Education. Some schools continue to develop their own courses in this area (example: LaRonge Indian Band, Survival School [Saskatoon], Yorkton). Other cultural groups (example: Ukrainian cultural groups) may well follow suit (or may have already done so) in convincing the Department of Education to develop courses.

Cross-cultural education is a relatively new area of study, having developed primarily over the last 15-20 years. Definitions continue to be debated at a variety of levels. Studies about cross-cultural needs have been conducted (example: Education Equity Report, Saskatchewan Human Rights Commission, Five Year Plan, Tusa Report [Department of Education]). These studies do not so much define the area as they reiterate the need for some measures.

There have been numerous recommendations that cross-cultural education should be part of every teacher's training, but, due in part to times of financial restraint and already full programs, this has not been acted on.

There are many evaluation aspects which could be studied:

1. What are the learning needs of children from different cultural groups?

2. What are the dilemmas for these students in existing school programs?

3. What content and strategies are successful with children of different cultural groups? (Research has already shown what is not effective.)

DRIVER EDUCATION

(Gordon McGregor, Educational Consultant, Department of Education)

Goals

The primary goal of the course is to teach those behaviors which are needed to avoid accidents. Therefore, the content of the course is founded upon research which identifies the types of accidents which young Saskatchewan drivers experience.

Supplementary goals of the program are to teach new drivers to drive smoothly, with courtesy and consideration for other drivers, and to develop a pride in their vehicle control and "traffic reading" skills.

Finally, an attempt is made throughout the course to condense the "experience" of other drivers and teach this in a manner which gives the new driver the tools needed to develop driving skills.

The in-car component

The in-car component is the focus of the course. The emphasis of the course is to provide the student with those skills which are needed to avoid accidents — vehicle control, visual and decision-making skills.

The system of teaching consists of a gradual transfer of responsibility from the instructor to the student, accompanied by demonstrations and the meeting of performance and knowledge objectives. The in-car course must be taught in its entirety, in the order specified.

The classroom component

The most suitable teaching style to meet the above goals is that currently used in adult education, evident in the D.W.I. program. That is, considerable input is solicited from the participants and the process of instruction is one of guiding, filling in the gaps, and setting a climate for self-discovery.

The course should be fun and interesting, with predominant use of the workshop format rather than a lecture format. It should also be viewed as a highly practical, rather than academic experience for new drivers.

Special efforts are made to move the course out of the verbal medium and into the visual medium. As driving is primarily a visual task, extensive use is made of slides and video.

The in-car lessons are comprised of a minimum of 6 hours behind the wheel, with an additional 6 hours of optional observation available. The in-car lessons include the following areas:

- external vehicle check and vehicle familiarization
- city driving
    - introduction
    - steering and braking
    - IPDE in the city
    - intersections
- highway driving
    - introduction
    - driving grid roads
    - passing
- driving slowly
- parking
- curve negotiation
- night driving
- manual transmission (optional)

FRENCH IMMERSION PROGRAM

(Joanne McCabe, School Effectiveness Coordinator, Swift Current School Division 4)

Immersion is the most effective method known for learning a second language. The aim of French Immersion is that students will become functionally bilingual. The degree of fluency will relate to the amount of time spent in the program.

Program evaluation within French Immersion might be done within subject areas, e.g., Math, Science, etc. as is practiced in the English section. However, periodically, we might wish to evaluate the program as a whole. The following questions could be considered:

1. Is the program meeting the needs of all students?
2. Are the aims, objectives, rationale appropriate and clear to all involved?
3. Are the curriculum guides appropriate and clear?
4. Are the curriculum guides used on a regular basis?
5. What teaching strategies are used? Are they appropriate for the age group?
6. Is the staff development program appropriate and adequate?
7. How do teachers, parents and students perceive the program?
8. How well are the students achieving?
9. Are the materials and resources appropriate to the program?
10. What methods of student evaluation and reporting to parents are used? Are they appropriate?
11. What about the logistical factors: facilities, time, cost, etc.?
12. What information or factors are present which indicate the most appropriate grade at which to introduce the immersion program?
13. What levels of competence and fluency are being achieved? Are they appropriate?

GUIDANCE

(Jani Powell, Langenburg)

Guidance in Saskatchewan schools is continually evolving to help students face the rapid changes in economic structures and conditions, life styles, family structures, vocational opportunities, societal needs, and educational choices.

Guidance should be a K-12 comprehensive developmental educational process and service responsible for assisting students to develop:

- a postive self concept
- effective human relationships
- awareness and understanding of career choices
- responsible membership in society
- decision-making competencies
- the ability to grow with change
- a positive lifestyle

Guidance can be identified in two specific areas, those of instruction and services.

Instructional goals of a guidance program generally include teaching or informing students of skills and options in the areas of lifestyles, life skills, and career education.

In the lifestyles area it is important that students acquire knowledge and awareness of the various options encountered in life so that they will be able to make informed decisions in selecting and creating lifestyle(s) most suited to their need and those of society. It is crucial that an understanding of the self and others be gained.

Also important is the acquisition of basic life skills. A guidance program seeks to provide students with an enhanced awareness of and increased ability to function in the following areas:

- achievement of self-awareness and independence
- acceptance of individual responsibility for behaviors in building and maintaining relationships
- ability to set goals and make decisions
- ability to manage time
- ability to choose appropriate educational, occupational and social options
- acquisition of coping skills
- knowledge of self

Equally important is career education. Goals of a guidance program include:

- developing an awareness of various careers and occupational options
- providing work training experience
- making career information available to students
- teaching job search skills, employability skills, and decision making skills
- developing economic awareness.

A guidance program should also offer **services** to enable students to function more efficiently in both school and outside settings. Basic services generally provided include:

- counselling
- consulting/liaison
- crisis intervention
- diagnosis/prescription/placement
- inservice
- program planning and evaluation

HEALTH EDUCATION

(Dr. Gerald E. Gray, Faculty of Education, University of Regina)

The provincial health education curricula follow three documents: the Division One and Two Health Curriculum Guide (1977), the Division Three Health Curriculum (1967), and the new Division Three Health Curriculum Guide (1985) which is temporarily on "hold." One of the major disadvantages of the health curriculum guides is the time elapsed since these documents were written. As a consequence the guides, as well as the resource materials, are now some ten to twenty years old. Many classrooms do not pay a great deal of attention to these guides.

According to the recommendations of the National Comprehensive School Health Education Guidelines Committee the following areas should be included in a school health education program: community health, environmental health, growth and development, personal health, safety and accident prevention, consumer health, family life, nutritional health, prevention of disease and disorders, and substance use and abuse. All of these areas are included in the current Saskatchewan curriculum guides as well as the proposed Division III curriculum guide.

School health education includes health instruction, services, and concern for the school's physical, social, and emotional environment.

A comprehensive school health instructional program is defined by the following ten questions, which can also provide a basis for evaluating a school health program.

1. Is the instruction intended to motivate health maintenance and promote wellness and not merely prevent disease or disability?
   (The aim of health instruction is to assist students in making decisions that can help them build or maintain the best kind of health status possible.)

2. Are the activities designed to develop decision-making competencies related to health and health behavior?

3. Is there a planned sequential K-12 curriculum based upon students' needs and current and emerging health concepts and societal issues?
   (A comprehensive program is flexible and responsive to changes in the learners and in the social settings in which they live.)

4. Do opportunities exist for all students to develop and demonstrate health-related knowledge, attitudes, and practices?
   (Comprehensive school health education functions in all three domains of learning: cognitive, affective, and psychomotor. The providing of knowledge alone is usually insufficient in addressing all the complexities of human health status.)

5. Is there an integration of the physical, mental, emotional, and social dimensions of health as the basis for study in the above mentioned content areas?

6. Are there specific program goals and objectives?
   (Objectives are addressed to the needs and interests of children and reflect what they can reasonably attain as a result of planned program activities. Objectives are written in measurable terms so that their attainment can be evaluated.)

7. Are formative and summative evaluation procedures used?
   (Evaluation should be continuous and concurrent with program activities because it provides both an inventory of present status and an assessment of progress.)

HOME ECONOMICS

(Margaret Prekaski, Sturgis Composite High School, Sturgis, Saskatchewan)

The Home Economics courses offered in Saskatchewan are designed to help young people take charge of their own lives. They are meant to help students make sound decisions as consumers and as members of society as a whole. Interpersonal relationship skills are taught with the goal of producing responsible family and community members.

The study of clothing, foods, finance, interior design, housing, and family will provide the knowledge base needed to make decisions. These courses also provide for the development of skills, values, and attitudes so vital for the attainment of a satisfying, productive life.

Both Division III and Division IV Curriculums are divided into Concepts, Generalizations, Objectives, and Suggested Learning Activities. The emphasis in these programs is on the multi-text approach and the use of a wide variety of resources.

Division III Home Economics is offered as a full credit, as is Home Economics 10. At the 30 level there are eight half credits offered which may be taken in either grade 11 or 12. These half classes are Food and Nutrition, Food and Its Preparation, Housing, Interior Design, Clothing and the Person, Clothing and Fashion, Finance, and Family Life. There are no prerequisities necessary at any level.

Because society is changing so rapidly we must be continually re-evaluating our courses of studies to ensure they are effectively meeting the needs of the students in our schools and of society in general. Some questions that could be asked to help achieve this are:

1. How well have Home Economics teachers implemented new courses of studies (or are they still simple 'cooking' and 'sewing')?

2. Does the curriculum guide meet the needs of teachers new to this area? Is it specific enough?

3. Is adequate training and inservice being provided so those teaching this subject have the appropriate knowledge base?

4. Is provision being made to provide for critical thinking and higher levels of learning?

5. Are a variety of evaluation tools being used to determine whether objectives are being met?

6. Are community resources and facilities being integrated into the courses of study?

7. Are individual differences and needs being met?

8. Have schools made provisions to accommodate and encourage boys as well as girls to study Home Economics?

9. Are adequate funds, facilities, and equipment provided to meet the needs of the Home Economics courses?

KINDERGARTEN EDUCATION

(Eileen J. Mansfield, Educational Consultant: Instruction/Primary—Saskatoon Board of Education)

Education in the kindergarten year is of paramount importance. The experiences in this often first formal schooling opportunity help to mold students' attitudes towards learning and provide the basic skills and impetus for their continuing learning progress. Through social interaction and participation in carefully planned activities suited to their needs, children enhance their language and thinking processes. Learning is integrated and extended in a secure, stimulating and responsive environment.

The success of the learning environment that is developed for kindergarten students is highly dependent on the interrelatedness of space, people, program, and teaching resources. The differing needs of children are met through facilitating, guiding, directing, interacting, assisting, suggesting, and individualizing.

The teacher's knowledge of the characteristics and needs of young children and of the goals of the program is crucial to the preparation of the kindergarten environment. Major stress is placed on an interdisciplinary approach to learning. To a young child the experiences of living and learning are inseparable. The environment is adjusted to meet the needs of individuals or groups of children and is shaped to reflect the nature of the community. In order to assess the progress the children make in that environment the teacher continuously evaluates and adjusts learning opportunities. The integrated curriculum provides intellectual, emotional, aesthetic, social, and physical stimulation to explore, imitate, construct, experiment, test, think, observe, probe, discuss, and be actively involved in the learning environment. The children come from a variety of backgrounds and cultures and are at different stages of development. Yet they all need to learn through first-hand experiences.

The kindergarten teacher provides facilities and activities that encourage children to explore their world in a relaxed yet guided way. It is understood and appreciated that play is a facilitator of cognitive development. Through play, children reflect what they know and use elements of their knowledge to create, to express themselves, and to explore their surroundings. Children come to understand their world by organizing and processing information and by altering their perceptions accordingly.

In Saskatchewan many teachers will welcome the updating and revision of the kindergarten curriculum guide. From the dynamic set of challenges prescribed in this new research document there will emerge fundamental evaluation questions which include the following:

1. When the goals and objectives peculiar to each individual kindergarten have been established, are the steps to be taken in order to attain these objectives clearly defined?

2. Are the goals of the kindergarten curriculum clearly coordinated with the educational opportunities prescribed for students in grades 1-5?

3. What changes are needed to ensure the planned incorporation of the common essential learnings into program delivery in kindergarten?

4. What factors need to be considered when deciding to lengthen the kindergarten day? What data needs to be collected to assist in making the decision?

5. How does one evaluate the appropriateness and effects of parental involvement?

6. Is the integration of exceptional children common and successful at the kindergarten level?

7. What is the optimal entrance age?

LANGUAGE ARTS/ENGLISH

(Dr. J.L.K. Latshaw, University of Saskatchewan)

In most instances, the existing Division I-III Language Arts curriculum guides are a combination of updated information taken from the 1971 *Education Saskatchewan* guides and greatly revised sections pertaining to the teaching of reading writing. Like the 1971 guides, these newer guides continue to emphasize the integrated nature of language learning but continue to describe the rationale, teaching approaches, and suggested content for each of the following components: (1) reading, (2) writing, (3) speaking, and (4) listening.

Briefly, the existing guides are alike in the following ways:

1. The following 1971 definition of Language Arts is still used. "Language Arts comprise those areas of instruction in which the learner is helped to achieve personally and socially satisfying development in oral and written communication. In the program, attention is given to the **receptive** processes (observing, listening, reading) as well as the **expressive** processes (speaking, writing)." (*Education Saskatchewan*, p. 1.)

2. The recommended scope and sequence of reading instruction is based on a developmental perspective of reading ability that begins with the learning-to-read process and extends through learning of critical reading skills. The developmental perspective of reading ability tends to be more detailed than the perspectives presented for the other components.

3. The recommended scope and sequence of writing instruction tends to focus more on increasing students' knowledge of written language than on ways to foster students' increased knowledge and appreciation of the writing process.

4. The recommended scope and sequence of listening instruction in most guides now includes increased emphasis on the development of critical listening skills.

5. The recommended scope and sequence of the speaking component has changed the least since 1971. Typically the changes have been limited to expanding the number of suggested activities.

A brief description of the instructional emphasis for each component would be as follows:

READING

Division I: The primary focus is the learning-to-read process. Typically the guides encourage teachers both to adopt an eclectic approach and to employ a wide variety of materials in teaching the process; however, in most classrooms the learning-to-read program usually reflects the instructional emphasis associated with the adopted basal reading series. An encouraging sign is that a growing number of teachers have discovered the value of coupling the use of basals with a rich selection of picture books.

Division II: There is a general agreement regarding the types of reading skills that should form the instructional focus for this division but less agreement regarding the priority, recommended teaching strategies, and the use of available resources.

A rapidly increasing number of teachers have recognized the potential value of incorporating more literature-centered activities into the program. This practice is less prevalent than it might be because teachers have problems procuring multiple copies of texts. Also, it takes added preparation time to organize such units of study and there is still a need to rely on teacher-prepared evaluation methods to assess students' performance in such activities.

If reading, writing, and literature are to be equal focuses of the same domain of the Language Arts curriculum then practicing classroom teachers will need to address the following questions:

1. Which of the existing instructional practices in the reading, writing, and literature programs should be retained for use in the new curriculum? Which ones need to be modified? Which need to be deleted?
2. What would be the advantages and disadvantages of using literature as the text materials for the learning-to-read component of the reading program?
3. What basic information and extent of reading background will classroom teachers need in order to present children's literature in the classroom?
4. What changes in classroom organization would be appropriate to permit students to assume more responsibility in improving their writing ability? (Selection of topics, organizatioon of ideas, responding to writing, revising writing, and editing writing, etc.)
5. What aspects of the writing component could be linked with selected instructional reading materials and literature? With the domains?
6. What types of evaluation and parent-reporting will need to be utilized if growth in the three components of literacy are viewed developmentally, i.e., from a student-centered perspective rather than a discipline-centered perspective?

If educational drama is to receive prominence throughout the K-12 language arts curriculum (as literature is to be considered in the domain of literacy), it would be a good idea to include identification of a sequence of potential drama activities as part of the process of learning more about children's literature. To do this the following kinds of guidelines would be helpful: (1) a developmental perspective of educational drama; (2) recommended ways to evaluate the educational drama activities; and (3) recommended ways to evaluate students' response and participation in these activities.

7. What kinds of information need to be known to prepare each of these guidelines? What assistance might teachers need to formulate these guidelines?

Unless the domain of communication and computers in the language arts curriculum is coupled with an adequate supply of school equipment to permit whole class word processing activities, computers will continue to be used primarily as electronic workbooks.

8. What type of inservice training and hands-on experiences do classroom teachers need to acquire the needed background to use computers in the language arts curriculum?

9. What types of interaction software (as opposed to workbook type) are currently available?

10. What types of software will need to be developed?

ENGLISH 10, 20, 30: AN OVERVIEW

(Ruth Robillard, Head, English Department, Balfour Collegiate, Regina)

All aspects of English — literature, writing, listening, speaking, reading, and viewing — are integrated as fully as possible in the Division IV English program. There are six underlying principles of the program: balance, sequence, flexibility, pattern, a combined intensive-extensive approach to literature, and integration. A year's program is organized into an "A" guide and a "B" guide at each level (English A10, English B10; English A20, English B20; English A30, English B30). It is a two-credit class at each grade level.

In an attempt to integrate, the communication skills of reading, writing, listening, speaking, and viewing are linked with the teaching of literature whenever feasible. These are treated as one area of study.

5. Is the program meeting the needs, interests and capabilities of the individual students?

   Consider:
   - the low achiever
   - the under achiever
   - the gifted
   - the learning disabled
   - the Native student
   - the ESL student

6. How successful are students in achieving the objectives of the English program?

7. Are support services appropriate to allow teachers to work effectively with the program and their students?

8. How are the "professional development" needs of teachers of English being met? Is the professional development program effective? How can it be improved?

9. What is the most effective pupil-teacher ratio in the English classroom?

10. How effective is the "new" course (or new material) being introduced (i.e., Gifted Education in English 10, 20, and 30)?

DIVISIONS I, II, III

(Dr. James E. Beamer, College of Education, University of Saskatchewan)

Current trends in mathematics education deal with the development of problem solving skills, the role of computational technology — specifically calculators and computers, dealing with a student body which is educated in SI metric — rather than imperial measures, and the use of estimation and exact mental computations.

At the Divisions I, II, and III levels work should progress to reflect current concerns with the topics above. Students should have experiences which will help them to choose the most appropriate method to perform a given computation: mentally, using paper and pencil algorithms, or using a calculator. Both of the other methods will encroach upon the time and skills needed for traditional pencil and paper methods. Indeed, the demands for estimation and exact mental computation will increase. Student skills in these areas should increase, rather than be adversely influenced by the new technologies.

DIVISION IV

(Mrs. Verda Petry, Sheldon-Williams Collegiate, Regina)

Algebra and Geometry-Trigonometry

These two courses form the back-bone of the provincial mathematics curriculum and are clearly intended for students planning to pursue a professional career in the fields of mathematics or science, and to prepare students to meet the needs of today's technological society.

The single most important objective of all courses is the development of problem solving skills. The objectives of the "New Math" of the sixties are downplayed. There is less emphasis on the axiomatic structure of mathematics, set theory, and number properties, in the new courses (1984).

The three algebra courses are sequential, and each is a prerequisite for the next course. Geometry-Trigonometry 10 and 30 may be offered, or Geometry-Trigonometry 30 alone. If either of these options is selected, however, there are adaptations to the algebra courses which are recommended, so that students may receive a unified and comprehensive mathematics package.

Mathematics

The Mathematics 10, 20, 30 courses were developed for students who require one mathematics credit for entrance to a post-secondary educational institution, but who are not planning a career with a significant mathematics component.

Some of the smaller schools in Saskatchewan lack sufficient student enrolment and staff, to enable them to offer a total mathematics program consisting of algebra and geometry-trigonometry. The Mathematics 10, 20, 30 courses were an attempt on the part of the Department of Education to meet the needs of these smaller schools by offering a one-credit mathematics program which would include the core elements of algebra, geometry-trigonometry, and applied mathematics. The result, however, is very heavy course of studies, and it is no longer offered in many schools. The practice in most schools is to direct students into the algebra stream who need one mathematics credit to meet university entrance requirements.

MULTICULTURAL CURRICULA

(Allan S. Melenchuk, Regina Catholic Schools)

Curriculum in this section is defined as the content found in instructional materials. It is the selections and organization of content that includes cognitions, skills, and attitudes that students may develop by interaction with the content. Ethnically and culturally pluralistic curriculum content has the potential for producing positive and fundamental changes in a school's climate. However, for this potential to be realized both the content and instructional delivery methodologies employed concerning ethnic, racial, and cultural diversity must be handled with great care and sensitivity. Multicultural curricula that do not address the issue of the development of positive attitudes toward other ethnic or cultural groups and are merely information delivery systems are inadequate no matter how accurate their portrayal of other groups. Fragmented or isolated courses or units of study that provide bits and pieces of information about ethnic or cultural groups that are sporadically interspersed into the school's instructional programs and curricula will not do the job. Nor will additive approaches, in which ethnic or cultural content becomes an appendage to existing school curricula, be effective. The most popular approach in Canada has been to integrate ethnic content into existing curricula and to pluralize curriculum materials. Curricula must be well-conceived and systematic and should include organizational plans that allow for ethnically or culturally specific content to become integral parts of all aspects of the school's educational programs.

The following are some common design criteria that should be observed to achieve optimum effectiveness in ethnically or culturally pluralistic curricula:

1. The curriculum should reflect a clear sense of purpose;
2. The curriculum should have a clearly articulated philosophy;
3. The curriculum should be organized around discernible objectives which can be translated into instructional plans with ease;
4. The materials, experiences, and activities used should be interdisciplinary, multidimensional, integrative, authentic, and comprehensive;
5. The curriculum should delineate both cognitive and affective skills required to assist students to understand ethnic and cultural diversity and avoid a reliance on the imparting of information or exhortation to achieve these ends;
6. The curriculum should be broadly conceptualized to include the experiences of both minority and majority ethnic or cultural groups.

When evaluating a specific curriculum, the following questions should be asked:

1. Does the curriculum reflect the ethnic learning styles of the students within the community being served?

2. Does the curriculum provide learning materials and strategies which enhance students' sense of self-worth and provide continuous opportunities to develop a better sense of self?

3. Do the learning materials reflect an accurate picture of the reality of Canada's ethnic and cultural diversity? And facilitate the development of mutual awareness, cross cultural understanding, and the ability to empathize with members of the ethnic or cultural group examined?

4. Does the content utilize valid sociotypes when generalizations are made and avoid portraying members of ethnic or cultural minorities in a biased or stereotypic manner?

5. Does the curriculum recognize the universality of the human experience and the interdependence of all human beings and communities?

22. Does the curriculum make maximum use of local community resources? Does it include local cultural variation?

23. Do the assessment procedures utilized in the curriculum reflect the ethnic and cultural backgrounds of the students, that is, are the assessment procedures culture specific?

24. Does the curriculum provide for ongoing, systematic evaluation of the goals, methods, and instructional materials utilized?

If the purpose of the multicultural curriculum is to develop cultural literacy in students, the answers to the questions posed should be primarily affirmative. Cultural literacy is defined as:

> The recognition or awareness of one's own culture or ethnicity and cultural continuities and discontinuities that exist between cultures. It is the development of a clarified cultural self-identity, positive attitudes toward self and other cultural, ethnic and racial groups, and personal self-actualization. The culturally literate individual has the ability to function, at least at a minimal level, within several cultural environments and is able to understand, appreciate and share the values, symbols, and institutions of several cultures. It is the development of multicultural perspectives and feelings which enables the individual to live a more enriched and fulfilled life and involves the ability to formulate creative and novel solutions to personal and social problems.

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MUSIC EDUCATION (ELEMENTARY)

(Betty Ann Arscott, Educational Consultant: Fine Arts, Saskatoon Board of Education)

Music education in the elementary school is of utmost importance for the total education of the child. Music contributes significantly to the cognitive and affective domains in the developmental process of our students. As in the case of other curricular areas, musical experiences in elementary school mold children's attitudes of learning and provide the basic skills for continued progress in high school and on into their adult lives. People are experiencing more leisure time and music can fill a very important role today and in our future. Our schools should provide a well-rounded music program for *every* child. Programs are necessary that stimulate intellectual development through doing, manipulating, exploring, listening, observing, discussing, creating, understanding, and being actively involved in their learning space. Music not only stimulates cognitive learning but also muscular, sensory, creative, and emotional learning.

The success of the music learning environment that is developed is highly dependent upon the facility design, the people, the program, and the teaching resources. Children use their entire brain, muscles, sense, and imagination to learn, and we need to provide programs and space that will enable children to learn their way. Children learn in an integrated way, and music is one "subject" that encompasses more disciplines than are possible in any single subject.

The music program uses a special approach to learning; the seven music elements rhythm, melody, harmony, form, tempo, dynamics, and tone color are studied in ever-increasing depth as the student moves through his/her elementary school education. Many activities are used to develop an understanding of music concepts — choral, instrumental (recorder, ukulele, Orff, guitar, band), movement, handbells, listening analysis, etc., depending upon the musical background of the teacher.

In Saskatchewan the new Core Proposals include "Arts Education" as a part of Core: it will include Music, Art, Drama, and Dance as parallel strands. From this set of challenges faced by music educators, emerge several evaluative questions which include the following:

1. What is the relationship between the "intended" curriculum and the "taught" curriculum in our schools?

2. What effect will the new program have on our own scope and sequence that we use as a guide for music K-8?

3. How can we ensure that a balanced program of music is present in all schools? For all students?

4. Teaching music is like teaching a second language, and teachers must have sufficient and thorough training to feel comfortable teaching the subject. How can we ensure that inservice education contributes to an adequate preparation for teachers in the field of music so they have the necessary skills to deliver the program?

5. To what degree do schools have adequate facilities and equipment to teach the curriculum?

PEER COUNSELLING

(Kal Newell, Cochrane High School, Regina)

Peer Counselling "is a learning situation in which students listen to and help facilitate the growth and development of other students. That is, it is a process in which trained and supervised students offer listening, support, and alternatives, but little or no advice to other students" (Carr, Peer Counselling Foundation, University of Victoria). Saskatchewan now has a provincial peer counselling organization that consists largely of secondary school peer counselling groups. Our organization has adopted Dr. Carr's definition.

Peer counselling is based on the substantiated fact that adolescents talk most commonly with their friends about things that trouble them. It is an attempt to give these "listening friends" more knowledge in social areas that concern teens. Peer counselling courses train students in listening and communication skills, emphasizing networking and positive prevention.

The core of all peer counselling programs is the listening communication skills section. Students work with their instructors through an experiential process. Role playing is extensively used in training, in addition to "looking inward" to understand themselves and their own behavior. "Looking outward" is the understanding of others, their behavior and motivations.

The information content of programs varies according to the specific needs of each school. A large school, for example, may wish to emphasize the welcoming of new students who might otherwise feel alienated in their new environment. Another school might wish to emphasize drug and alcohol abuse prevention. Generally, in addition to the communication skills, all programs include information on the following: drugs and alcohol, suicide, sexuality, assertiveness, family relationships, values, decision making, counselling limitations, referrals, and confidentiality and its limitations.

The networking involved is twofold. It is a process that involves students talking with students who have a solid base of knowledge in a variety of areas; it is also an attempt to reach out to students who claim they talk to no one about things that trouble them. Many of these students will talk more willingly with other students when they hear that peer counsellors are trustworthy. The second aspect of networking is building communication between student helpers and responsible adults. The adults include the students' trainers (teachers and counsellors) as well as professionals, non-professionals from local helping agencies, and self-help groups. The limitations of peer counsellors are well defined, and it is essential that they refer certain concerns of clients to responsible adults. In other instances, they may confidentially discuss their counselling techniques with a trainer in order to ensure that they are being effective.

As a positive preventative program, peer counselling promotes a "we/we" as opposed to a "we/they" attitude. Peer counsellors develop an attitude that it is their school and that they *can* make a difference. This attitude can manifest itself in a variety of ways in a school. Such things as walking down the hall and having the confidence to smile and say "hi" to others without fearing rejection, to bringing in guest speakers or holding noon hour films or talk sessions are some of the many projects that peer counsellors run. Peer counsellor referrals often help students in difficulty before their situation becomes a crisis.

(Wayne Kartusch, Supervisor of Physical Education, Regina Catholic Schools)

Physical Education, as a required discipline in Saskatchewan schools from Kindergarten through Grade Nine, is based primarily on the principles of movement education and is usually taught by generalist classroom teachers at the elementary school level. Provision is also made for credit courses in Physical Education in Division IV. The provincial curriculum allows for skill development to coincide with growth and development patterns of the children. A two phased philosophical approach is used for the major components of the curriculum: a *general education* in dance/rhythmics, gymnastics, game skills and combatives, and seasonal activities, progresses into *specific education* in these major component areas. Keeping this in mind, Physical Education, as an integral part of total education, should utilize carefully selected activities to produce the physically educated individual who possesses physical skills, physical fitness, knowledge and understanding of physical development and activity, and all inherent outgrowths of this, social skills, and attitudes and appreciations conducive to the development of the total person.

Program review and evaluation must be considered a continuing process. General questions teachers and administrators may address are as follows:

1. Are the objectives of the Physical Education curriculum compatible with the total educational objectives of the school (Division)?

2. Is there cooperation and communication within the school (Division) to allow for sequential program development which will avoid unnecessary repetition of subject matter?

3. Are the needs of all students being considered, keeping in mind such things as physical characteristics, body build, background of experience, level of maturity, and physical ability?

4. Are considerations such as student potential and student improvement a component of the evaluation process?

5. Do the teaching methods allow for the development of positive attitudes towards physical and healthful activity for adult life?

6. What are the attitudes and expectations of students towards this discipline, and are they taken into consideration when planning a program?

7. Are provisions made for significant input into the purchase of new and required equipment and supplies which will enable full implementation of the program as well as for inspection and maintenance of equipment and facilities to ensure a safe teaching environment?

Within the framework and context of these general statements, specific questions can then be set out to fully develop the process of evaluation, keeping in mind the major aim of Physical Education is to meet the varying neuromuscular needs and diversified activity interests of the student in the school setting.

(Dr. Paul Hart, Faculty of Education, University of Regina)

Science education in Saskatchewan is in the midst of a process of renewal or reformulation. This is the result of large scale national assessments of science in schools and changing societal demands on the educational system. Thus, existing science curricula may soon change.

The curriculum guides for divisions I and II science, developed in 1971, are based on conceptual schemes and process skills. Suggested activities provide ideas for concept development similar to those in the division III guide, which also recommends a multi-text approach for seventh grade life science, eighth grade earth science, and ninth grade physical science. Division IV students are introduced to survey courses in the disciplines of biology, chemistry, and physics. Geology and agriculture curricula exist but are taught infrequently.

Recommendations for renewal in science programs include the following: emphasizing a science-technology-society-environment connection, presenting a more authentic view of science, and challenging science enthusiasts and young women in science education. Current pressures for change fall into several areas. For example, because science and technology are fields that have experienced rapid knowledge expansion, science teachers may be teaching outdated or inaccurate information no matter how hard they work to remain current. In addition, the recent demand for "science for all" requires that science teachers develop and implement courses for many different types of students.

In Saskatchewan the goals of education were recently translated into a number of common essential learnings. The challenge to science educators is to begin to articulate scientific literacy objectives with these learnings so that progress toward goals can be assessed objectively. From this dynamic set of challenges faced by science educators emerge several fundamental evaluation questions including the following:

1. What is the relationship between the intended curricula from science curriculum guides and the transacted or taught curriculum in schools?

2. How does the proposed philosophy for science education, which includes the added dimension of a science-technology-society emphasis, align with the real world of the science classrooms in Saskatchewan?

3. To what degree should science courses at each educational level focus on various dimensions of scientific literacy?

4. How can we ensure that a **balanced** approach to scientific literacy is present within all science courses as they are taught in the classroom?

5. What kind of curriculum guides are required to facilitate implementation of new science programs?

6. What instructional strategies are most appropriate to teaching subject matter within a science-in-society framework?

7. What process should be established, and at what stages of science materials development, so that direct teacher input can be assured?

8. What training is required to assist teachers in developing appropriate skills in science teaching within the new versus the old framework for science education?

SKILLS FOR ADOLESCENCE—QUEST NATIONAL CENTER

3.51

(Mrs Diane Armstrong, Teacher, Regina Catholic Schools)

Skills for Adolescence is a program designed for students in grades 6 to 8. This program teaches adolescents to take responsibility for their own health and happiness. It responds to challenges and problems facing adolescents today and it helps students acquire social and coping skills for facing a world characterized by stress, uncertainty and rapid change, i.e., changing family structures, drug and alcohol abuse, juvenile delinquency. The entire program is based on the premise that it is essential to address these problems and make students aware that they can control them.

Skills for Adolescence provides a detailed manual with step-by-step instructions for teaching the course. Other materials included are a student textbook and workbook as well as parents' materials. Students are actively involved in their own learning by reading, writing, discussing, role playing, and taking part in large and small group projects, as well as school and community projects.

The course is organized into units which focus on building self-confidence, learning about emotions, improving family and peer relationships, developing critical thinking skills for decision making, and setting goals for a successful life.

It is believed that *Skills for Adolescence* gives adolescents a strong foundation for making good decisions and prepares them for facing the challenges, tasks, and rewards of growing up.

Evaluation Questions

1. What are the unique needs of the students in a given school regarding this program (e.g., grade 6-8, age 11-15 years, areas of self-confidence, emotional concerns, peer and family relationships, good decision making skills, goal setting)?

2. How effectively were teachers prepared for the project — inservice (e.g., accreditation)?

3. Where does this project fit in the present curriculum (e.g., supplement to health curriculum)?

4. How effective are support materials (e.g., detailed manual, student workbooks, textbooks)?

5. How can parents be most effectively involved in this program?

6. What is student opinion and attitude toward the program?

7. How is student progress documented (e.g., attention, participation, completion of assignments, effort, quality of work)?

8. How effective is the program in the area of drug and alcohol prevention?

SOCIAL STUDIES

(Dr. Don C. Barnett, College of Education, University of Saskatchewan)

The Social Studies curriculum is currently under revision (1987) to incorporate the principles and topics recommended by the social science reference committee (1983) and the Ministers' advisory committee on curriculum and instruction (1985). There is to be an increased emphasis on the areas of skills and values, current topics and issues, the conceptual approach to organization, and an interdisciplinary basis to the curriculum.

At the elementary level, the emphasis on major concepts and main understanding is to be maintained, although additional guidance is needed in the areas of skills and values. Topics remain basically the same, following the principle of "expanding horizons" as students move up the grades. The concepts of families and communities are taught in the early grades while Saskatchewan and Canada are offered in the later grades of elementary school.

Currently (1987), middle years (grades 7-9) are undergoing major revisions from the history-geography basis of the former curriculum to an interdisciplinary and conceptual perspective. Global understandings are taught in grade 7, a focus on the individual and society is offered in grade 8, and grade 9 looks at various roots of modern society.

Although curriculum revision has yet to begin at the high school level, directions are established to move from courses on ancient and medieval histories of Middle Eastern and European nation states, the great wars, and acts of revolution and imperialism by 19th century and early 20th century European powers, to issues more directly relevant to the contemporary world (global conflicts, population pressures, racism, minorities, current economic and political issues, environmental protection, etc.). Historical trends and principles are not to be excluded from the curriculum, but history and geography are to share an interdisciplinary stage with other social science disciplines. In grade 10 students are to study social organizations, in grade 11 world issues, and Canadian Studies in grade 12.

Are the curriculum revisions in Social Studies adhering to the philosophy and structure established by the Department of Education? The following guidelines may serve as a checklist to evaluate the curriculum and answer the question posed.

1. Is the curriculum supported with a sufficient variety of materials and alternative teaching strategies for classroom teachers?

2. What inservice strategies are in place to implement the curriculum in all schools?

3. Are the curriculum guides written in a manner which can be understood clearly and actually used by all teachers?

4. Is the curriculum and its support materials conceptually organzied?

5. Does the curriculum provide an orientation toward teaching (a) decision making, (b) inquiry/discovery, and (c) the valuing process?

6. Does the curriculum include an overall skills development chart which provides guidance for teachers at various grade levels for introducing, reinforcing, and/or emphasizing particular skills?

7. Do the topics in the curriculum draw from various social science disciplines in an interdisciplinary manner?

8. Does the curriculum include major societal issues which are considered relevant and vital to the contemporary worlds of (a) children, (b) teenagers, and (c) adults?

SOCIETY, ENVIRONMENT AND ENERGY DEVELOPMENT STUDIES

(Barry Mitschke, Head, Science Department, Robert Usher Collegiate, Regina)

SEEDS is a federally chartered non-profit Foundation established in 1976 in Alberta. The Foundation's governing body is a 15 member volunteer Board of Directors. There is equal representation from education, industry and the physical, natural, and social services. The primary objective of SEEDS is the development and dissemination of a Canadian Energy Literacy Series (ELS) for students in grades 1 to 12.

Materials were written, test-piloted, evaluated, and revised during the late 70's. Science Research Associates (SRA) Canada published the materials during the 1980's. This ELS is: comprehensive, in-depth, student centered, scope and sequenced, integrated, and made in Canada with student and teacher components. See the box for the titles.

SEEDS 1	The Sun
SEEDS 2	Wind, Water, Wood
SEEDS 3	Fossil Fuels
SEEDS 4	Extraction of Energy
SEEDS 5	Conversion of Energy
SEEDS 6	Using Energy
SEEDS 7-9	Non-renewable Sources of Energy
	Renewable Souces of Energy
	Sources of Electrical Energy
SEEDS 10-12	Energy Systems
	Energy Technologies
	Energy in the Future

When the marketing and dissemination through SRA did not reach acceptable levels, SEEDS took on the marketing.

SEEDS is now providing Implementation Workshops across Canada where teachers can obtain a free set of materials for their level.

Besides the materials, SEEDS also has developed resource materials (poster sets, field trip guides, bibliography and newsletter), conducts an annual Shell Merit Institute, and assists with the development of regional projects and awareness programs.

The SEEDS Foundation is an outstanding Canadian example of the results that can be achieved through cooperation. With the support, encouragement, and active involvement of education, environment and industry, the Foundation has developed Canada's most comprehensive energy/environment education program supported by a planned and interactive inservice process. All of this innovation raises questions for Saskatchewan educators:

1. Can the SEEDS curriculum development model be applied to curriculum development in Saskatchewan?

2. Can the SEEDS inservice model be applied to curriculum implementation in Saskatchewan?

3. How do we determine the baseline energy literacy level of the average Saskatchewan student?

4. Energy is just one major concept in environmental education (EE). Can the SEEDS modular approach of the ELS be applied successfully to other EE concepts?

5. a. What percentage of the Saskatchewan teaching force will be implementors of the SEEDS ELS?
   b. How soon will saturation be reached?

SPECIAL EDUCATION

(Audrey Roadhouse, Supervisor of Special Services, Regina Board of Education)

Special Education in Saskatchewan has continued to change over the years. Historically, many children with challenging needs were not in school. It was often felt that they could not or should not be in regular school. Over time, we have moved from that point of view through the segregated school movement to the present trend of integration and total mainstreaming. The main impetus behind this movement has been the parents of many handicapped students, who feel their children should be educated with their non-handicapped peers.

Along with the growing numbers of special needs children in the school system has come an increased awareness of the need for curriculum. Many curricula presently being used and developed are not emphasizing the traditional domains of reading, math, and social studies but reflect the organization of adult life in domains of work, leisure, and personal management. The change in emphasis to a more functional curriculum has had a positive effect on reducing the need to label or categorize special needs children.

There has been rapid growth in the publishing of materials available for special needs children due to an increased demand for age appropriate resources. There has been rapid growth in the use of technology, particularly computers. We now have word processing to aid learning disabled students, voice activated computers for the physically handicapped, and computers that can read for the visually impaired.

In order to meet the wide variety of needs of many handicapped children there is an increasing demand for instructional assistants. Our community colleges have taken the lead role in training assistants. Instructional assistants often play a key role in delivering the program to special needs students.

Also, because often one cannot separate the educational needs of the students from their psychological, medical and physical needs, there is an increased movement toward working with other agencies in the sharing of services. Within this team, many parents have taken on a more active role in identifying the short and long term needs of their children. There is an increased need to provide program continuity between the home, school, and community.

Depending on the type and severity of the handicapped condition, students are presently being taught in a variety of settings. The aim is to educate the student in the least restrictive environment. For some handicapped children, the regular classroom may restrict their learning. They may need a more segregated environment with a lower pupil/teacher ratio. For others if placed in the mainstream they may achieve at a level beyond the expectations which others hold for them. It is often difficult to balance what is offered in the mainstream with the independent living skills the child needs to be taught. Each child needs to be assessed with an emphasis on placing the child in an instructional environment that best suits his/her needs.

As the delivery of services to children with challenging needs continues to change, the following questions may help guide in the evaluation process:

Program

1. Have the appropriate groups, e.g., teachers, parents, outside agencies, been involved in designing the program for the special needs student?

2. Are the long term goals of the program appropriate?

3. Has the program been evaluated?

TECHNICAL EDUCATION

(E. Walter Selin, Regional Director of Education, LaRonge)

Technical Education is composed of three major areas of study as reflected by the depth of the specific subject matter presented in each area, the amount of equipment and space necessary to teach the program, the number of hours required per year to complete the program, and the expertise of the individual instructors.

The Industrial Arts portions may start in Grade 8 and may continue to Grade 12. The programs are referred to as the 8-9-15-25-35 series. A student usually has four different subjects introduced per year resulting in one-quarter of the year spent in each subject area. The classroom generally is operated as a multi-lab situation with students rotating through the four areas in a structured manner. The curriculum contains a series of quarter credit modules in nine different subject areas. The subject areas are: Materials (Ceramics, Metals, Plastics, Woods); Energy (Electrical Electronics, Mechanical Fluids); and Communication (Graphics, Drafting, Photography).

The Vocational Education portions are structured with a full credit per year in each subject following a more involved "hands-on" approach to the subject. The programs are referred to as the 14-24-34 series and are taught in Division IV. The subjects included are: Automotives, Building Construction, Cosmetology, Commercial Cooking, Electricity, Electronics, Machining, and Welding. A student may receive a maximum of three credits in any one subject while enrolled in Division IV.

The Technical Education portions are referred to as the 13-23-33 series. These subjects are a full credit per year in each subject and generally are structured with a greater theory base. The subjects are Construction, Drafting, Electrical Electronics, and Mechanical. Again, a student in Division IV may obtain a maximum of three credits in any one subject.

The three major areas allow schools of any size to select the options best suited for the space available and the interests of students. The programs are designed to widen the experiences of students and to provide an introduction to the technological environment in which we live. Because all Technical programs are modular in design, each program has a wide range of interest modules available for students.

Evaluation questions which might be asked include:

1. What is the philosophy of the Board of Education, Administration, and staff towards Technical Education programs?

2. Does the school program provide students with a wide ranging exposure to many Technical Education programs or does it provide in-depth exposure to a more limited selection of programs?

3. What are the staff qualifications to adequately teach the range of subject offerings?

4. What mechanisms are in place for teacher inservice and outside consultation from qualified personnel?

5. What policies are in place for equipment purchases, upgrading and maintenance in each subject area?

6. What student guidance is available to assist students in subject selection and how does the availability of subject choice tie into the total school programming?

4

EVALUATION APPROACHES

In this Part there are examples of how to ACTUALLY go about doing an evaluation. Many of the examples have a brief scenario of a possible situation in a specific area in order to indicate a situation which might lead to conducting an evaluation.

The Table of Contents indicates a range of activities which might be the basis for a program evaluation. Goals and objectives evaluations are described, as are approaches to evaluating a curriculum, a new program, textbooks, school climate and the like. As was pointed out in the Introduction to this manual, the word "program" doesn't delimit what might be evaluated. The evaluation could be the total educational program of a school or the evaluation of a single lesson in a classroom. Most program evaluations fall between these extremes.

The Part concludes with a number of approaches prepared by Saskatchewan educators. In each instance the writer has provided a description of how he or she might evaluate an aspect of school program.

One would use or refer to this Part — *rather than read all of it.*

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EVALUATING GOALS, OBJECTIVES, AND ATTITUDES

(Dr. Howard Birnie, University of Saskatchewan, Saskatoon, Saskatchewan.)

WHAT SHOULD BE THE PROGRAM PURPOSES?

In successive weeks, the Board of Education for Prairie School Division received presentations from what may be described as pressure groups demanding that courses in Subject A and in Subject B, not presently offered in the schools, be introduced into the schools in the next year.

The Director suggested that the whole program of the schools be evaluated in order to formulate a legitimate response to the requests. His advice included the strong recommendation that this evaluation, and, in fact, any evaluation, should begin with a goals study. In particular, he suggested the use of a goals instrument which would allow students, teachers, and representatives of the public to indicate their goal priorities for the schools. The Director stated: "Because schools are unable to offer all courses or do everything they are called on to do, they must begin by establishing priorities. There are never easy answers to program problems, but with the knowledge generated by a goals study at hand, better decisions may be made."

A common element in the professional literature on evaluation and in curriculum models is the reference to goals and objectives. The case being made is that no evaluation may proceed, nor a curriculum be developed, without first ascertaining what outcomes were intended. In addition, goals are generally considered to be the outward manifestation of the basic assumptions and values of the society which has created the schools.

There is general agreement that decision-makers in education, ranging from Boards of Education to the individual teacher in the classroom, are all in a position to make improved decisions if:

1. teachers, students, and parents have indicated their preferences for tasks to be performed by the school;
2. these task preferences have been listed in rank-order; and
3. the ranking of goals changes to reflect the changes in society's values.

The goals model that has been developed at the University of Saskatchewan is a data-collection model. The data that are collected are useful in any stage of program evaluation. These data concentrate on goals, objectives, and attitudes. The kit of materials (Birnie, 1985) utilized in goals-related exercises derives from the work of L. Downey and Phi Delta Kappa International. The contributions made at the University of Saskatchewan have been to Canadianize the original materials, revise them twice, and field test them thoroughly over a period of ten years in a dozen major projects and hundreds of minor projects (Birnie, 1981).

In any program evaluation there are three different exercises related to goals which may be carried out using the Goals Kit materials. These are:

1. the ranking of goals in order of importance;
2. the separation of goals into groups: those for which the school has major responsibility, those for which the responsibility is to be shared, and those for which agencies outside the school have the major responsibility; and
3. the rating of the level of performance of current school practices.

HOW MIGHT THE PRESENT CURRICULUM BE EVALUATED?

There was some concern in Kingburg Elementary School that the Division II music classes were falling short of teacher, student, and parent expectations. Many teachers found it a difficult subject to teach because of inadequate training, yet there was no specialist in the school. The Division II teachers decided to look at the curriculum guide for further direction. However, because of their lack of expertise, they had trouble understanding all but the most general goals and objectives.

Because the teachers knew that they would continue to be required to teach this challenging subject, they decided to evaluate the curriculum (as they understood it) and to restate the objectives in terms that would be more helpful to teachers with minimal experience in music.

Directions suggests that the first step in curriculum development is curriculum evaluation. It is also assumed that **local** curriculum **evaluation** will precede local **adoption, adaptation,** and **implementation.** The following is an approach which could provide the framework for the process of evaluating a curriculum which is in place in schools.

RATIONALE AND OBJECTIVES

1. Is a **rationale** stated? The rationale (or philosophy, or major goals/objectives) is usually present to indicate **why** the curriculum was created and **what** the anticipated outcomes are.

   Means of Data Collection: documentary review, interview, correspondence, etc.

2. Are there **general objectives**? These are usually statements of quite a high level of abstraction (e.g., cognitive — understanding persons and their culture; affective — teach respect for the dignity, worth, rights, etc. of individuals and groups). These objectives alone are of little use, but should provide a link between the rationale and specific objectives.

   Data Collection: documentary review.

3. Are there **specific or behavioral objectives**? These describe specific acts, attitudes, skills, and knowledge a student is to learn. The usefulness of specific objectives is enhanced when they are stated in behavioral terms, indicating precisely the student behavior which indicates that the objective has been accomplished.

   It is easy to state low-level behavioral objectives. The difficulty of writing behavioral objectives at the higher levels is evidenced by the scarcity of such objectives.

   Data Collection: documentary review, interviews, observation, surveys, etc.

EVALUATION

9. Are the **evaluation procedures** consistent with the objectives, subject matter, and learning experiences?

   Data Collection: documentary review, samples, tests, records.

OVERALL EVALUATION

10. A final **judgment.** What conclusions are drawn when all the data have been analyzed?

    - What are the predicted effects and actual effects of the curriculum with respect to
      - students?
      - teachers?
      - the school?
      - the community?

    - What is an overall comparison of this curriculum and its materials to some similar curriculum
      - in this curriculum area or some other curriculum area?
      - in use previously?
      - in use in some other school or grade?

    - What recommendations should be made or what courses of action should be taken
      - with respect to materials?
      - with respect to suitability to this setting?
      - with respect to appropriateness of objectives?

WHAT TO DO WHEN THERE ARE CHOICES TO BE MADE

Miss Gordon and Mrs. Morrissay, two Grade One teachers, were extremely committed to the teaching of reading. Teachers in a nearby school were considering a new reading program about which they were highly enthusiastic. Miss Gordon and Mrs. Morrissay, however, felt that their own reading program was very successful. They had been using it for five years and students seemed to be responding very well. For this reason, they decided it was time to evaluate their own program in order to demonstrate its worth. They also felt that an evaluation would pinpoint areas which could be improved.

Some of the teachers considering the new program decided that they would do an evaluation of the innovative program as well.

HOW TO EVALUATE AN EXISTING PROGRAM/CURRICULUM OR A NEW PROGRAM/CURRICULUM

Often the reason for evaluating an existing program is because we want to improve it or want to improve how we are using it.

Sometimes it is necessary to evaluate a new program before a decision is made about employing it or before it is put in place following the decision.

In both instances, it is important to have a pattern or procedure to follow which will assist teachers and administrators in their decision-making. The following steps may provide a model.*

Step I — Assessing the existing circumstances or situation

Existing Program/Curriculum		New Program/Curriculum
1. Why are you required to evaluate this program?		1. Why are you required to evaluate this program?
2. Is there a need for changing or revising this program?		2. Is there a need for this program?
3. With what evidence are you working? What evidence is available?		3. What evidence is available to support selecting this program?
_____	4. Who will do the evaluation?	_____
_____	5. When will it begin?	_____
_____	end?	_____

*Adapted from Edward F. DeRoche, *An Administrator's Guide for Evaluating Programs and Personnel.* Copyright © 1981 by Allyn and Bacon, Inc. Reprinted with permission.

14. Are the objectives stated in such a way that will facilitate evaluation if the objectives have been achieved?	14. Are the objectives stated in such a way that will facilitate evaluation if the objectives have been achieved?

Step III — Learning Experiences and Subject Matter

Existing	New
15. What subject matter has to be revised? Deleted? Added?	15. What content (subject matter) will have to be developed to achieve the objectives?
16. What learning experiences should be retained because they contribute toward meeting the objectives?	16. What skills will have to be identified and developed?
17. What learning experiences have to be revised? Deleted? Added?	17. What learning experiences will have to be developed in order to contribute toward achievement of the objectives?
18. What classroom situations will provide opportunity for learners to express appropriate behaviors?	18. What classroom situations will need to be developed and implemented in order to provide opportunities for learners to express appropriate behaviors?
19. What out-of-classroom situations will provide opportunities for learners to express appropriate behaviors?	19. What other school experiences will need to be created and implemented to give learners opportunities to express behaviors implied by the objectives?
20. What situations, experiences, and activities will give students the opportunity to use and apply their knowledge, skills, and learning?	20. What situations, experiences, and activities will give students the opportunity to use and apply their knowledge, skills, and learning?

A PROGRAM EVALUATION MODEL*

This is a comprehensive, general-purpose model for evaluating educational programs based on the "CIPP" model of evaluation (see 6.23):

C - **Context:** is any program needed?
I - **Input:** what are possible alternative programs?
P - **Process:** is the program being used?
P - **Product:** does the program work?

The full model will rarely be used in its entirety to evaluate any one program. Depending upon its state of maturity, a program may require Context or Input or Process or Product evaluation or perhaps two or even three of them. (Context evaluation may be a pre-program activity cutting across many program areas, or a single-program evaluation activity.)

Although the parts of the model follow logically (Context, Input, Process, Product) they need not be used in any strict sequence. Depending upon the status of the program to be evaluated, one or more of them could be used in any order.

CONTEXT

This section of the evaluation searches for unmet needs, for opportunities to meet them, and for problems that prevent needs from being met. Equivalent terms would be "needs assessment" and "taking stock."

It answers such questions as:

- What might students be taught?
- What are the gaps between what students know and what they should know?
- What is the relative importance of these gaps?
- Which ones can be closed by this program and which ones cannot?
- Which ones would be easiest to close?
- Which ones would be hardest to close?
- How much effort, time, and money would it take to create a new program if one is not already available?
- What kinds of people, materials, equipment, and facilities are available to design and/or generate a new program?
- What stands in the way of success?

*Saskatoon Board of Education (1977). "Evaluation of courses and programs: An introductory manual for practioners," mimeographed.

PRODUCT

This section of the evaluation determines whether the program is producing the intended effects. It finds whether the program is working.

It answers such questions as:

- What are the objectives of the program?*
- What is an acceptable level of student performance for these objectives?*
- Were the objectives accomplished?
- Were they accomplished better for some students than for others?
- What parts of the program worked best?
- What parts of the program did not work?
- How can the cost of the program be reduced without diluting its effectiveness?
- Would the original problem recur if the program were eliminated?

*Ideally, this would have been determined when the program was introduced and will simply be confirmed at the time of the product evaluation.

CRITERIA FOR EVALUATING A TEXTBOOK, A TEXTBOOK SERIES or for COMPARING SERIES

A WAY TO EVALUATE A TEXTBOOK OR STUDENT MATERIALS WHEN THERE IS AN ARRAY OF OPTIONS

Our school received permission to develop and offer an optional program in Agriculture for the Middle Years (grades 6, 7 and 8). Now we have to make some decision about student materials. Because there are so many materials available it is going to be necessary to evaluate the options we have:

- *Are there enough materials to allow us to present this program without having a student textbook? or*
- *Is there a single text which could be used for each year of the program? or*
- *Do we select a series of textbooks? and*
- *How might we make a decision when there is more than one textbook? more than one series?*

The following format is one that may be used when evaluating a number of textbooks in order to reach a decision about which one(s) to use.

CURRICULUM AREA: _____

EVALUATED FOR GRADE: _____

OPTION 1

Author(s)/Editor(s): _____

Title: _____

Series: _____

Publisher: _____

Canadian Distributor: _____

Publication date: _____ Edition: _____

OPTION 2

Author(s)/Editor(s): _____

Title: _____

Series: _____

Publisher: _____

Canadian Distributor: _____

Publication date: _____ Edition: _____

OPTION 3

Author(s)/Editor(s): _____

Title: _____

Series: _____

Publisher: _____

Canadian Distributor: _____

Publication date: _____ Edition: _____

III. **Philosophy**

A.	Does the content reflect the needs, interests, and values of the community? (Score 2)	2	___	___	___
B.	Is the text compatible with the philosophical approach of the _____ curriculum? (Score 2)	2	___	___	___

Comments: _____

_____

IV. **Content**

A. Does the text/series give comprehensive coverage to all important topics in this subject area? (for example, Health)

1.	Health knowledge, attitudes, decisions, and behavior. (Score 2)	2	___	___	___
2.	Mental and social health. (Score 2)	2	___	___	___
3.	Growth and development. (Score 2)	2	___	___	___
4.	Safety and first aid. (Score 2)	2	___	___	___
5.	Disease and disorders. (Score 2)	2	___	___	___
6.	Nutrition. (Score 2)	2	___	___	___
7.	Environment. (Score 2)	2	___	___	___
8.	Health information, products, and services. (Score 2)	2	___	___	___
9.	Dependency-causing substances. (Score 2)	2	___	___	___
10.	Health organizations. (Score 2)	2	___	___	___
11.	Health and the future. (Score 2)	2	___	___	___

B.	Is the content accurate and authentic? Are information sources documented? Is it current? (Score 3)	3	___	___	___
C.	Is the content logically developed? Is organization consistent? (Score 3)	3	___	___	___
D.	Can this material be used to discourage stereotypic views and biases toward diverse human attributes, conditions, attitudes and/or behaviors (e.g., sex role, ethnic, racial stereotyping)? (Score 1)	1	___	___	___

Comments: _____

_____

VI. Treatment

A.	Is the text/series suitable for all pupils in the classroom? (Score 3)	3	___	___	___
B.	Can the text/series be easily implemented in a multigrade classroom? (Score 2)	2	___	___	___
C.	Is the sentence structure suitable to the maturity level of students? (Score 3)	3	___	___	___
D.	Is the vocabulary appropriate for the reading level of the students? (Score 3)	3	___	___	___
E.	Is the material adaptable to individual differences? (Score 2)	2	___	___	___
F.	Are alternate resources available or suggested? (Score 1)	1	___	___	___
G.	Are levels of abstraction appropriate for the students? (Score 3)	3	___	___	___
H.	Is the interest level appropriate for the students? (Score 3)	3	___	___	___
I.	Does the text/series use full-color photographs and drawings as an integral part of the content presentation? (Score 3)	3	___	___	___

Comments: _____

_____

VII. Review and Evaluation

A.	Does the text/series have a page of review questions and exercises, and a page of test questions at the end of each chapter? (Score 2)	2	___	___	___
B.	Does the text/series have a summary of important points at the end of each chapter? (Score 1)	1	___	___	___
C.	Does the text/series have at the beginning or end of each chapter a listing of terms introduced in the chapter, to help introduce vocabulary and make reading easier? (Score 1)	1	___	___	___
D.	Is the text/series accompanied by independent test booklets with answer keys? (Score 2)	2	___	___	___

Comments: _____

_____

X. **Cost**

A. Is the cost realistic for the school? For the students who will be using it? (Score 3) 3 ___ ___ ___

B. Is the cost worth the use that will be made of the text/series? (Score 3) 3 ___ ___ ___

Comments: _____

_____

TOTALS 125 ___ ___ ___

General Impressions: _____

_____

_____

Which option do you feel would be most suitable for use in the _____ **program?**

For which grades? _____

Comments: _____

_____

_____

AN EVALUATION WHICH MIGHT ASSIST THE DEVELOPMENT OF A FUNDING PROPOSAL

Teachers and administrators in the Prairie School Division were informed that more funds were going to be available for the development and maintenance of school libraries. However, in order to receive funding, schools would be required to demonstrate need and also to submit proposals for library improvement.

Staff members saw this as an opportunity for badly-needed change. At present no teacher-librarians were employed by the district, and in most instances the "library" consisted of a few shelves of books. Teachers often complained that materials were outdated, insufficient in number, and difficult to locate.

The principal and three teachers at High Creek Elementary School decided they wanted to work as a team to evaluate their present library holdings, and to draw up the funding proposal. To begin with, each staff person outlined what s/he felt was essential for a stronger library program. These outlines were compared and common issues highlighted.

Learning media are an integral part of the instructional program. The school library, or resource centre, is the hub about which an educational media program operates. In a good media program the teacher-librarian works in close cooperation with classroom teachers and others in planning, implementing, and evaluating learning activities. Such cooperation helps ensure that students' acquisition of specific learning skills is not an isolated event occurring only within the context of the school library, but rather is integrated with all curriculum areas whenever possible. Such basic learning skills as the finding, generation, evaluation, and application of information help the student to function effectively as an individual and to participate successfully in society.

The following types of resources are part of every media program:

material
- books, periodicals, maps, film, video and audio tapes, software, etc.
- equipment
- facilities

personnel
budget

The effectiveness of a media program depends upon the organization and management of all resources; the types of instruction offered; the integration of library, learning, and research skills into all curriculum areas; and the continuation of cooperative planning for program development, maintenance, and evaluation.

The materials on the following pages (4.28-4.31) provide on example of how a media program may be evaluated with a questionnaire using rating scales. This document was adapted from one that is currently in use in North Carolina. Learning media program guidelines from the provinces of Alberta and Ontario were incorporated in this questionnaire. Sample questions are included in various categories; these may be used as models for the evaluation questions one wishes to consider. A summary worksheet is provided at the end of the questionnaire. On it one may determine program strengths and weaknesses, and outline plans for change.

The teacher-librarian and other library staff should be key members of the evaluation team. In order to complete the questionnaire it will be necessary to talk with a number of teachers, administrators, and possibly students. In addition to looking at the facilities and materials themselves, it may also be necessary to look at budget details and other records.

II. Program Learning Outcomes

To what extent:

1. has a curriculum of sequential developmental media skills been developed for all grade levels?	0	1	2	3	4
2. are students using media effectively?	0	1	2	3	4
3. are teachers using the media centre in their teaching?	0	1	2	3	4
4. is there interaction between teachers and the teacher-librarian?	0	1	2	3	4
5. do classroom projects reflect students' use of the media centre?	0	1	2	3	4
6. are media skills integrated into all curriculum areas?	0	1	2	3	4
7. is the media centre effective in meeting the needs of all students?	0	1	2	3	4
8. is the media centre effective in meeting the needs of the teachers?	0	1	2	3	4
9. (other questions)					

Determine the average for this category by dividing the total of the circled numbers in the category by the number of items in the category.

(Total ____ ; Average ____)**

III. Organization

To what extent:

1. does scheduling permit maximum use of the resource centre by:					
a. classes	0	1	2	3	4
b. small groups	0	1	2	3	4
c. individuals	0	1	2	3	4
2. does the circulation system promote maximum accessibility of materials?	0	1	2	3	4
3. do questions address the management of materials, including cataloguing, inventory, discard, replacement, and other practices?	0	1	2	3	4

(other evaluation questions you need to ask)

Determine the average for this category by dividing the total of the circled numbers in the category by the number of items in the category.

(Total ____ ; Average ____)**

**Place the "Average" on the chart on page 4.32.

VI. Physical Resources

To what extent:

1. are physical facilities appropriate in terms of					
a. actual space allotted for library use	0	1	2	3	4
b. accessibility	0	1	2	3	4
c. arrangement of furniture/equipment	0	1	2	3	4
d. storage?	0	1	2	3	4
2. is the library an attractive, welcoming place?	0	1	2	3	4
3. does the quantity of materials correspond to need:					
a. books (fiction, nonfiction, reference, etc.)	0	1	2	3	4
b. equipment	0	1	2	3	4
c. non-print media	0	1	2	3	4
d. others?	0	1	2	3	4
4. is equipment adequate in terms of:					
a. quantity	0	1	2	3	4
b. quality?	0	1	2	3	4
5. is adequate space available for equipment?	0	1	2	3	4
6. have arrangements been made for interlibrary loans of materials/equipment with:					
a. central board office library	0	1	2	3	4
b. other school libraries	0	1	2	3	4
c. public libraries	0	1	2	3	4
d. universities?	0	1	2	3	4

(Many other evaluation questions can and should be developed in this area.)

Determine the average for this category by dividing the total of the circled numbers in the category by the number of items in the category.

(Total ____ ; Average ____)**

VII. Financing

To what extent:

1. does the school budget allow for the maintenance of the school library as it presently exists in terms of					
a. materials/equipment	0	1	2	3	4
b. staffing?	0	1	2	3	4
2. does the budget provide for needed changes to the system:					
a. materials/equipment	0	1	2	3	4
b. staffing?	0	1	2	3	4
3. can present budget shortcomings be resolved?	0	1	2	3	4
4. are budget requests made in the context of program needs?	0	1	2	3	4

(other evaluation questions)

Determine the average for this category by dividing the total of the circled numbers in the category by the number of items in the category.

(Total ____ ; Average ____)**

**Place the "Average" on the chart on page 4.28.

EVALUATING USING SAMPLES OR PRODUCTS OF STUDENT WORK

Mr. Tedorovych was tired of teaching handwriting. He found it increasingly difficult to show an interest in the topic when teaching it, and felt certain that his grade six class would benefit from a new approach. When he came across a new method in a professional journal, he decided to try it, even though the school year was well under way. Before beginning, however, he realized that it would be important to evaluate the effectiveness of the new approach.

Mr. Tedorovych knew that concrete evidence was important in an evaluation. He decided to use samples of students' work, particularly because he had saved examples of both excellent and poor work collected at various times over the past few years. In this way he could compare the quality of work produced while using the new teaching method with that produced in previous years using the old method. Prior to beginning the new approach, he was careful to gather numerous samples from his present students in order to note any growth or change in their work as the year progressed.

There are many aspects of the handwriting program which might be evaluated: students' grasp of skills and increasing fluency with these skills, scheduling of lessons, teaching methods, and so on. One way of evaluating aspects of such a program makes use of collected samples of students' work. These samples provide concrete evidence of the quality of and changes in students' handwriting skills resulting from the program. A clear "before and after" comparison becomes possible.

While information of this type can be gathered quickly and easily, it should be remembered that (a) it may be difficult to interpret and judge the results, and (b) information is provided on the **product** of the program, but not on program **processes**. It may take some thought to determine which handwriting skills best demonstrate achievement of program goals and program effectiveness. Unless these are kept in mind, difficulties may arise in evaluating the program by this means.

Before collecting work samples, you should do the following:

- list program aspects to be evaluated
- determine which skills represent these program aspects
- set standards
- decide how work samples will be assessed
- decide over what period of time the samples will be gathered
- determine from which students the samples will be collected

In using this method of data collection, it is important to collect samples from a representative group if work is not gathered from **all** students. Care should be taken to obtain samples from high, low, and "average" achievers, and to use **the same students** each time work is collected.

A WAY TO EVALUATE AN ASPECT WHICH IS NOT REALLY A PROGRAM

Our comprehensive school seemed to be in a rut. Tardiness and truancy were becoming serious problems, and there seemed to be more students coming to school "high" on alcohol or drugs. While only a few years ago students had shown a great deal of interest in extracurricular activities, now only small numbers of students participated and many activities were cancelled. Even more alarming, the school's reputation for its high academic standing was beginning to falter. Teachers were becoming more and more dissatisfied with their jobs. The guidance counsellor suggested that school climate be evaluated. This idea was greeted with some enthusiasm, and a committee was developed. The evaluation approach included the use of a questionnaire and some checklists, direct observation, and interviews. The committee was able to identify issues that were most important to the teachers, and also those which were of concern to a large number of students. After the evaluation, the committee began meeting regularly with the student council to plan ways in which some of the crucial problems could be resolved.

School climate refers to the "feel" of a school (or classroom). Is the school a pleasant place to be, or is it full of tension? Climate is the collective set of attitudes, beliefs, and behaviors within a building. It is one of the primary factors that affects staff productivity and student achievement. A positive climate promotes satisfaction and growth, while one that is negative can lead to any number of problems.

School climate is influenced by many things. Types and levels of communication among school personnel have a great deal to do with the climate of a school. The leadership that is provided by the principal often sets the tone for the overall school climate. The socio-economic background of the majority of the students may influence school climate.

In order to evaluate school climate, it might be helpful to use three methods of gathering information: questionnaires for staff and students, direct observation, and interview. In this way limitations of any of the methods can be supplemented by strengths in the others.

Because climate refers to "what is," it may not be necessary to consider goals and objectives at length prior to beginning the evaluation, except for certain specific things which should be looked at. However, once the data are analyzed, it is important that goals and objectives be discussed in detail so that plans for improvement can be made.

A number of excellent questionnaires are available for assessing school climate. Several examples will be given.

The CFK Ltd. School Climate Profile is a questionnaire which measures a number of factors of school climate. A few of these include respect, high morale, opportunity for input, and school renewal. One unique thing about this instrument is that it rates not only "what is," but also, "what should be." The questionnaire can be completed by all types of school personnel, including students. A real advantage of using an instrument of this type is that expectations are considered, and once results have been obtained, both areas of satisfaction and weakness will be easy to identify. The following example is modelled after the CFK format. A staff might wish to follow a similar procedure when stating their own evaluation questions.

1. Questionnaire

Please circle the appropriate number in columns on the right according to the scale below.

1 - Almost never
2 - Occasionally
3 - Frequently
4 - Almost Always

	What is	What should be
1. I feel good about coming to this school.	1 2 3 4	1 2 3 4
2. When differences arise, we are able to discuss them in an atmosphere of mutual respect.	1 2 3 4	1 2 3 4
3. There is a spirit of cooperation in this school.	1 2 3 4	1 2 3 4
4. The opinions of teachers and other staff are listened to when important decisions are made.	1 2 3 4	1 2 3 4
5. Students feel that they matter in this school.	1 2 3 4	1 2 3 4
(Other questions which you wish to consider can be asked with this format.)	1 2 3 4	1 2 3 4

School problems can easily be identified using a checklist such as the following:

Problems	Extent of Problems		
	Great	Moderate	Little/None
1. Low student morale	☐	☐	☐
2. Violence in playground activities	☐	☐	☐
3. Students coming to school "high" on drugs/alcohol	☐	☐	☐
4. Others	☐	☐	☐

A similar checklist, filled out by students and teachers, involves rating the numbers of students who fit into certain categories. For example:

How many students in class:	All 100%	Half 50%	Some 25%	None 0%
1. are constantly tardy?	☐	☐	☐	☐
2. have trouble completing assignments on time?	☐	☐	☐	☐
3. do not assume responsibility for their actions?	☐	☐	☐	☐
4. work conscientiously?	☐	☐	☐	☐
5. contribute to class discussion?	☐	☐	☐	☐
6. cooperate well with other students?	☐	☐	☐	☐
7. others	☐	☐	☐	☐

Some observers may wish to enter comments in a notebook. Others might prefer to have a checklist available, so that certain behaviors may be marked as they occur. Some checklists are divided into segments in which the observer records all behaviors occurring within a specific time frame. An observer might deal with one particular student, or a whole class. One such checklist might look something like this:

Each time one of the following behaviors occurs within five minutes, make a mark in the appropriate space:

First 5 Minutes		Second 5 Minutes		Third 5 Minutes	
Talking out of turn	I	Talking out of turn		Talking out of turn	
Gazing out window	++++	Gazing out window	I	Gazing out window	
Fidgeting	++++ II	Fidgeting	II	Fidgeting	
Others		Others		Others	

Information of this sort could refer to time on task, but also could provide valid climate information.

Another type of checklist used by an observer might involve a quick rating of events. For example:

Please rate your class in the following areas this morning/afternoon/day, etc. Make a mark on the scale at a point you feel is appropriate:

Time on task	1	3	5	Motivation	1	3	5
	Low		High		Low		High
Morale	1	3	5	Work Completed	1	3	5
	Low		High		Low		High

Observation might also include reviewing school records in key areas such as discipline referrals, truancy, interactions with police and social service agencies, and so on. School rules might be an important area to consider in evaluating climate. Because so many aspects make up school climate, the most thorough review will take a number of approaches.

Whatever methods are used to evaluate school climate — questionnaires, interviews, direct observation — the data should all be compiled and reviewed by a committee. In this way, bias is reduced, and the most important issues and trends can be isolated. School climate can be improved. Conducting an evaluation and making plans to correct areas of weakness is the most realistic way of effecting change.

EVALUATING AN INSERVICE PROGRAM

AN EVALUATION APPROACH WHICH LOOKS FOR DISCREPANCIES BETWEEN PRACTICES AND STANDARDS

Mrs. Reilly and several other teachers were on a committee concerned with improving inservice education in their district. Mrs. Reilly had read a great deal of research literature concerning the optimal conditions for inservice. A colleague, Mr. Schwartz, had obtained a copy of the provincial guidelines for inservice. The two teachers agreed that there seemed to be a great discrepancy between current practices, provincial guidelines, and research findings.

Mrs. Reilly felt that no real improvement could come without an evaluation. She convinced the committee that unless some of the observed discrepancies were addressed, it would be difficult to draw up satisfactory proposals for change.

"Inservice education" usually refers to a planned activity or series of activities intended to promote the sharing of ideas among teachers, and to assist in the professional development of teachers. These enrichment activities, geared specifically toward the teacher as an adult learner, are often used in order to promote new teaching techniques, or to implement new programs and/or curricula. The intended end result of inservice education is increased professionalism and school improvement.

Historically, inservice dates back to the mid-nineteenth century; the purpose at that time was to review and drill teachers in the basic subjects. Today's focus has changed toward greater teacher responsibility for the planning and administration of inservice activities. Present day inservice education in Saskatchewan can include anything from conferences, institutes, workshops, and staff meetings, to field trips, teacher exchanges, occupational experience, community surveys, and professional writing, consulting, and speaking. Self-directed learning also constitutes a type of inservice: subscribing to professional journals, purchasing books and materials, attending lectures, and setting up informal study groups can all be considered inservice activities. So can the provision of individualized support and consultative services.

A great deal of research has investigated inservice education. A number of theorists have proposed specific attributes which are believed to contribute to the effectiveness of an inservice program. Evaluating inservice programs as they occur can provide vital information which can be used later on in the planning of future inservice activities. Because inservice activities are most effective when they are based upon teachers' expressed needs, it stands to reason that teachers should be primary data sources when evaluating an inservice program.

The following example, which modifies an S.T.F. document and includes some guidelines from the Saskatchewan Interagency Professional Development Committee, shows how inservice programs may be evaluated with a questionnaire.

Circle one						Check one		
Not Applicable	Not at All	Partially	Mostly	Totally		Not Important	Undecided	Important
					13. Were the inservice activities led by individuals who are credible in the eyes of the participants?	-	-	-
1	2	3	4	5	14. Were programs delivered at the local level whenever possible?	-	-	-
1	2	3	4	5	15. Were activities systematically planned and conducted?	-	-	-
1	2	3	4	5	16. Were activities cyclical, sustained and on-going, rather than one-shot events?	-	-	-
1	2	3	4	5	17. Was the inservice supported by adequate allocations of time and resources?	-	-	-
1	2	3	4	5	18. Are inservice programs regularly and continuously evaluated against the objectives established for the program?	-	-	-

EVALUATING EXTRACURRICULAR ACTIVITIES

AN ATTEMPT TO DETERMINE PRESENT LEVELS OF ACTIVITY AND HOW TO PLAN FOR THE FUTURE

Students in the school showed a great deal of interest in extracurricular activities. Staff members were keen as well, although they recognized that budget cuts might make continued operation at present levels difficult. In addition, scheduling problems were beginning to become evident: for example, drama club and chorus were scheduled for the same time, and a large number of students wanted to participate in both. Even so, requests for new interest groups were coming in at the rate of about one per month. At a staff meeting it was decided not only to evaluate the program, but also to survey parents to determine their attitudes about the program, and to see whether the school could count on their support for fundraising and other voluntary participation which might allow activities to continue in spite of budget cuts. Through this evaluation it is hoped to ascertain: (a) which activities are considered most important by students, staff, and parents; (b) how scheduling might be rearranged in order to permit maximum participation by those who are most interested; and (c) which activities can realistically be continued in spite of budgetary restrictions.

Extracurricular activities form an integral part of the educational experience offered by the school. In these activities students are given opportunities to grow in new ways, and to acquire skills that might not be learned in the ordinary classroom milieu. Students often are not evaluated when they participate in extra-curricular activities; involvement usually is voluntary.

Extracurricular activities usually include some of the following areas:

- athletics,
- student government,
- school newspaper,
- arts activities,
- clubs.

School assemblies and special school events might also be considered extracurricular activities. Larger numbers of students are involved in these, and participation is more likely to be mandatory.

While extracurricular activities are invaluable in terms of (a) extra learning experiences provided for students, and (b) the beneficial effect these activities have upon school climate, they are also costly in terms of staff time and can involve considerable financial expenditures. There are many reasons why extracurricular activity programs should be evaluated.

EXTRACURRICULAR ACTIVITIES FACT SHEET

4.47

1. Activity: _____
2. Supervisor: _____
3. Goals and objectives of the activity (list in order of priority):
   a. _____
   b. _____
   c. _____
   d. _____
4. Is any fee charged for participation in activities? _____
   Amount _____
5. Ages/grades of student participants: _____
6. Number of participants: Male: _____ Female: _____
7. Meeting place: _____
8. Meeting time: _____
9. Specific activities with which the group has been involved:
   a. _____
   b. _____
10. What costs are involved in running the group? Total _____
    Specific expenditures (a) _____ (b) _____ (c) _____
11. In what ways is the group meeting its objectives?
    a. _____
    b. _____
    c. _____
12. Are difficulties encountered in meeting certain objectives? _____
    Which ones? _____
    Why? a. _____
    b. _____
    c. _____

EVALUATING PARENT-TEACHER CONFERENCES 4.49

The parent-teacher conference is a highly effective means of reporting student progress which (a) provides for two-way communication between parents and the school and (b) permits individualized reports for each child. The conference provides an opportunity for teachers and parents to discuss all phases of the child's development, aspects of the school's program, and other issues of concern.

Two-way communication should be emphasized in a conference. It is important to recognize that what happens in one environment will have an effect on what happens in another. Information from parents can be crucial in helping teachers tailor programs to meet the needs of individual students. Parents can also provide a great deal of information concerning program effectiveness. When the home and the school jointly share the responsibility for a child's development, a great deal can be achieved.

There are two major types of conferences utilized in Saskatchewan today: group conferences, and individual conferences.

Group conferences are often scheduled early in the year, providing parents a chance to visit the school and become acquainted with teachers and other school personnel. At this time a number of goals may be achieved:

- school or district philosophy may be explained
- teachers may speak of growth characteristics, needs, and interests typical of students in their particular age group
- intended course and program goals may be outlined, including methods of attaining these goals (e.g., teaching strategies, pupil evaluation, etc.)
- parents' concerns and questions may be addressed

Successful group conferences pave the way to individual parent-teacher conferences later in the year. For this reason, it is a good idea to evaluate the effectiveness of this initial contact with parents. The following are types of evaluation questions which might be asked during and after a group conference:

1. Were parents made to feel comfortable in the school setting? (could be determined by noting manner of staff presentations, how long parents stayed on the premises, the nature of their conversations with school personnel, how freely they interacted with other parents, the presence/absence of children at the conference, etc.)

2. Were any representative groups of the parent population conspicuously absent? If so, which ones? Why? What means might be used to draw them into future school activities?

3. Were school and program goals articulated clearly in a manner easily understood by parents?

4. Was an attempt made to convince parents that their presence and their input are important to the functioning of the school? To encourage parents' initiating contact with the school in the future?

5. Others

EVALUATING REPORTING PROCEDURES

4.51

Reporting procedures constitute an important part of the liaison between school and home. They also form an important connecting link from one year to the next in the course of a student's progress through school, particularly in the case of transfers from one school to another.

Three aspects of the evaluation of student progress should be considered when reporting procedures are being evaluated. These include:

(a) standard(s) of comparison being used
(b) symbols used to denote achievement/progress
(c) communication format used

Standards of comparison

The traditional standard of comparison, used in many Saskatchewan schools, is that of the individual in relation to the group. The average or midpoint of the group is often considered the norm. It is essentially a competitive system.

Criterion-referenced evaluation is less competitive. In most cases a minimum standard for achievement is set. The method is often used in curriculum areas in which learnings are specific and sequential; concepts are often "checked off" when skills are mastered. It is a form of evaluation often used in individualized programming.

Other standards used include attendance, effort applied, and progress or improvement.

Some examples of evaluation questions which might be asked concerning the standards of comparison include:

1. Does the standard adequately reflect mastery, progress, or achievement in the curriculum area being evaluated?

2. Is the standard set in such a way as to allow for the vast range of individual differences in students? Is it realistic?

3. What criteria are used for determining the standard(s)?

Symbols used for denoting progress or achievement

The types of symbols used depend upon a number of things:

(a) nature of the element being reported
(b) the standard of comparison that is used
(c) district or school policy
(d) individual teachers

In many Saskatchewan schools letter grades or percentages are used for marking in many curriculum areas. Checklists may be used for reporting achievement in some criterion-referenced evaluation. Attendance is often reported simply by recording the number of days a student has been absent in each month. Areas such as effort applied, progress, and improvement usually are reported through words such as "outstanding," "satisfactory," or "needs improvement"; however, a letter grade may be used to represent each of the above categories. Rating scales may also be used in some cases. In many instances teacher comments are included as part of the report.

EVALUATION OF SOFTWARE

The form* (on the next page) is designed to assist in evaluating software and thinking about software design. The form emphasizes instructional qualities. Although it includes questions about the mechanics of management and operations, the most important items deal with what goes on in students' heads as a result of working with the program.

As educational software is reviewed, it is necessary to take many factors into account. For instance, few programs can be called "bad" or "good" without considering the context in which they are to be used. (The example on the form is for science.)

Because anecdotes, impressions, and other comments increase the usefulness of an evaluation, one might use the back of the form to record information or reactions.

Plan to take one or two hours to evaluate a program.

The following notes will help clarify the form.

Name of program: Give its title.
Author/programmer: Note the name of the author or designer, if given.
Copyright date: Indicate date and whether program is in the public domain.
Subject area: Note science field or topic; appropriateness within the curriculum.
Grade level: Give range, if possible. (Use A for adult.)
Brief description: Write a short explanatory subtitle such as "problem solving by controlling variables in science fiction space adventure" or "identification and review of cell parts and functions."

Type of software: Check as many as apply. Examples of **Other** are "has graphing capability"; "can be used with interfacing hardware (tablet, modem, probe)"; "recreational adventure"; "management."

General: This includes characteristics that affect the management of the program in the classroom.
Student reaction: Comment on motivation, traps, success level, related behavior, opinions expressed, and any other information you get from talking to or observing students.
Recommended uses: Record anything that would be useful to a teacher when deciding when, how, and why to use this software. Make specific suggestions — for example, "introduces proportions to gifted seventh graders"; "review of **x** prior to unit on **y**"; "independent study of **z**"; "alternative to **a**"; "reinforcement of **b**"; "for groups of three"; "free time use"; "five-minute activity station involving **c**"; "motivational activity for **d**."

Company, Address, Phone, Price: Give this information, if available from software package or other sources, to assist in ordering or making inquiries.

Processes of science: Mark all blanks that seem applicable. Remember to indicate what the student is **doing**, not what the student is **finding out about**. For instance, a program explaining the characteristics of groups of animals might teach about classifying but not engage the student in actually doing any classifying. Instead, it might use recall to see if the student could remember the facts presented.

*Karen E. Reynolds is Field Editor of *Science Scope*. This article and the evaluation form were originally published in *Science and Children* and in the Saskatchewan Science Teachers' Society newsletter *Accelerator* (11:6). The evaluation form was developed during the NSTA Teachers' Honors Computer Workshop in July 1984.

The following list includes notes to describe the processes given. Be sure to add other terms if none of the ones here fits what you have in mind.

Recalling—remembering
Observing—using sight, hearing, and/or other senses to gather information (but not merely looking at the text or pictures)
Interpreting—deriving meaning from data (as opposed to making observations)
Communicating—describing with words (writing, taking notes, word processing) and/or with graphs, tables, and charts
Comparing—noting similarities and differences; matching known to unknown
Measuring—quantifying according to standard scales
Organizing—grouping in series or lists; classifying; compiling; setting up file formats or spread sheets; identifying (rather than merely recalling)
Classifying—designing a scheme that lets things be put into groups (a subset of organizing)
Relating—seeing how effects follow from causes; comparing effects of variables; comparing predictions with results; forming questions; creating coordinate graphing
Questioning—raising questions for further student investigation
Hypothesizing—deducing, predicting, or guessing what will happen given a certain set of circumstances
Problem solving—going through the process of arriving at conclusions or deriving answers
Inferring—drawing conclusions from assembled data (as opposed to drawing them from direct observation)
Generalizing—coming up with a rule or statement that accounts for all the data
Inventing—using what's already known in new ways
Creating—making new things or formulating new ideas
Other—other processes, or your own favorite or special terms

Hardware required: Note the kind of computer and check the number of disk drives needed. (If recommending, use **rec.**) Printer can be marked **rec, req** for required, or **NA** for not applicable if there's nothing to print. Other hardware might include such components as instruments, joysticks, paddles, modems, color monitors, big screens, tablets, and robots.

Mechanics of program: Check to see if color programs work on black and white. Indicate whether graphics are **hi** or **lo** resolution. If there is sound, check it; if sound is optional put **opt.** Check **Save progress** if that feature is an option. **Required time** refers to the minimum time it takes a student or group to accomplish a task or complete at least a section of the program.

Instruction and presentation: This section includes general characteristics of the program and your intuitive reactions to them. Consider the following when rating:

Clarity of directions—Are the instructions on the screen clear? (Others would be considered under **documentation**.)
Ease of operation—Can you get through the program without being distracted by operating procedures?
Error handling—What happens if you press a wrong key? (Good programs are forgiving.)
Graphics—Do they have an instructional function or are they simply decorative?
Sound—How does it fit the program? Does it provide valuable cues? Does it avoid being distracting?
Readability of text and graphics—Do vocabulary, sentence structure, spacing, formatting, and graphics contribute to high readability?
Motivation—Does the program create a high level of interest?
Student materials—Does the program include worksheets, extra problems, or ideas for related activities? (Use **NA** if none are provided.)
Appropriate use of technology—Is the computer in a role in which it can perform better than other learning aids such as texts, worksheets, illustrations, and films?

EVALUATING GUIDANCE PROGRAMS: AN APPROACH

4.57

(Joan Mushka, Guidance Counsellor and English teacher, Campbell Collegiate, Regina, Saskatchewan.)

I. INTRODUCTION

The evaluation of guidance and counselling programs is a much-needed activity in a very sensitive area of a school's offering. Programs sometimes come and go in a manner which is anything but systematic. Sometimes counsellors are bombarded with too many conflicting demands. The following approach to evaluation provides a screening device to establish priorities for counselling programs and to provide a rationale for program offerings. The evaluator is the in-school counsellor.

II. OBJECTIVES

The following approach can be used to accomplish the following objectives:

a. To streamline guidance programs.

b. To firmly establish priorities.

c. To provide a continuous system of evaluation.

d. To either evaluate an existing program or establish a new one.

e. To evaluate in either a rural or urban setting.

f. To incorporate the interests and needs of all concerned audiences.

g. To achieve evaluation at minimal expense.

III. EVALUATION DESIGN: GETTING APPROVAL

Submit a 1-2 page written proposal to your principal for permission to proceed. Your proposal should include:

a. An introduction or general overview of your objectives and procedures.

b. A description of the entity to be evaluated. (Are you planning to evaluate part or all of your program?)

c. A statement of objectives. (See II above.)

d. An identification of your audiences, those people who have concerns in relation to your evaluation. (See IV below.)

e. A statement of procedure which, in this case, is a combination of interview and questionnaire.

f. A statement of how and to whom you will report results.

g. A budget statement which will include duplicating, stamps, stationery, and, perhaps, travel.

Instructions: Please read each of the following questions, and rank order the **five** most important services and any others that are important to you in the area of PERSONAL COUNSELLING SERVICES. Put a 1 behind the most important; a 2 behind the second, etc., until all the really important ones are covered. You can go down to 10 or so, but do not rank them all.

1. Personal problem solving _____
2. Enhancing self-esteem _____
3. Counselling on problems with parents _____
4. Alcohol and drug counselling _____
5. Suicide prevention counselling _____
6. Relationship counselling _____
7. Counselling on problems with teachers _____
8. Counselling on problems with friends _____
9. Abuse counselling _____
10. Counselling on death and dying _____
11. Financial counselling _____
12. Other: _____ _____
    (Please specify)
13. Please give a specific statement summarizing your view of the delivery of services in the area of personal counselling at our school at the present time.

_____

_____

_____

_____

_____

VI. EVALUATION DESIGN: CONDUCTING THE SURVEY

Having prepared questionnaires for each of the services being evaluated, it is a good idea to get a reaction from group representatives before deciding on the final draft.

Survey all students, teachers, and school administrators on site. Mail surveys to all parents, preferably by including a self-addressed stamped envelope.

EVALUATING THEME TEACHING

(Lynda Ast, Regina Public School Division)

A classroom teacher's responsibility is to implement a program that meets the guidelines set out by the Department of Education for the particular grade level he/she teaches. Programs must also meet the particular needs and interests of the students presently enrolled.

Theme teaching is a creative approach that many Kindergarten, Grade One, Grade Two, and Grade Three teachers use to accomplish all these needs.* Theme teaching involves the integration of knowledge and/or various skills in all subject areas during a set period of time.

There are many examples of themes that can be used in a theme teaching approach. Some specific examples of possible themes are: Apples, Colors, Bears, Feelings, The Senses, Disneyland, Community Helpers, All About Me, Life in Early Saskatchewan. Some general topics from which a specific theme may be chosen include: any season, any special day, any animal, any country, any nationality.

After an appropriate theme is chosen, lessons, activities, and special events are planned relating to it. The theme provides a focal point. The teacher and learners may need to develop innovative ideas to allow for use of the theme in all the subject areas.

On the following pages there is a form for the evaluation of the organizational design of such a theme approach. Using the data collected it should be possible to determine if any improvements or modifications are necessary before the theme is used in the classroom.

*Theme teaching is not restricted to these particular grade levels. However, this is the level which will be used in this example.

Is there provision for interaction between the teacher:

13.	and a large group?	YES ☐ NO ☐	1	2	3	4	5
14.	and a small group?	YES ☐ NO ☐	1	2	3	4	5
15.	and an individual?	YES ☐ NO ☐	1	2	3	4	5

SECTION D. Is there provision for student tasks to involve each of the following:

16.	verbal expression? **	YES ☐ NO ☐	1	2	3	4	5
17.	hands-on time with varied appropriate materials?	YES ☐ NO ☐	1	2	3	4	5
18.	pencil and paper tasks?	YES ☐ NO ☐	1	2	3	4	5
19.	Is there a balance of verbal, hands-on, and pencil and paper tasks?	YES ☐ NO ☐	1	2	3	4	5

SECTION E. Has provision been made for:

20.	some type of community involvement? **	YES ☐ NO ☐	1	2	3	4	5

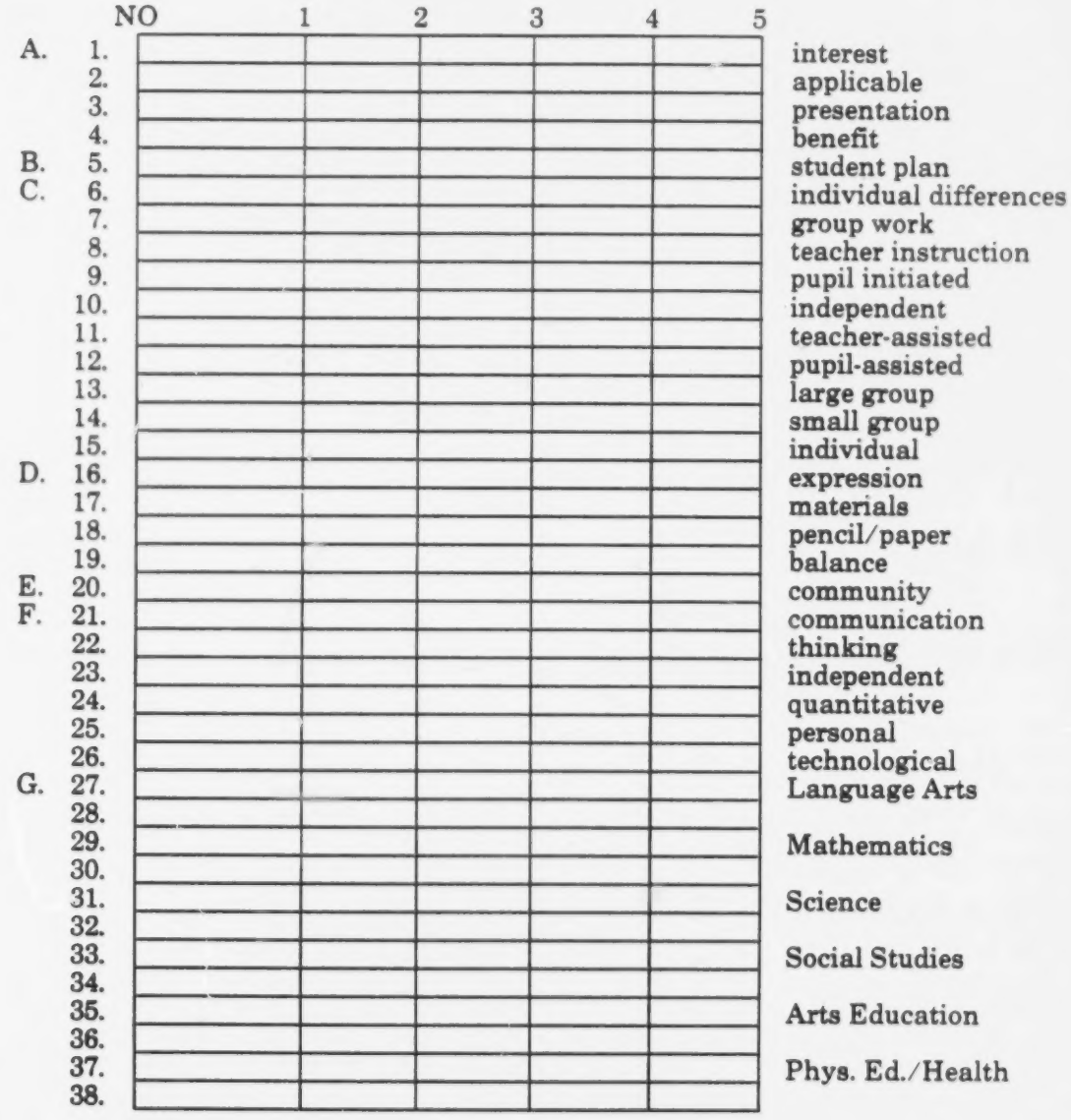
SECTION F. Do provisions in planning and content provide for growth in the common essential learnings identified in the Core Curriculum?

21.	Communication Skills **	YES ☐ NO ☐	1	2	3	4	5
22.	Critical and Creative Thinking	YES ☐ NO ☐	1	2	3	4	5
23.	Independent Learning	YES ☐ NO ☐	1	2	3	4	5
24.	Numerical and Quantitative Learning	YES ☐ NO ☐	1	2	3	4	5
25.	Personal and Social Skills and Values	YES ☐ NO ☐	1	2	3	4	5
26.	Technological Literacy	YES ☐ NO ☐	1	2	3	4	5

**Transfer information for these sections to the bar graph on page 4.65.

Shade in the following bar graph using the rating numbers circled in each question answered with a "YES" on the questionnaire:

RATING NUMBERS



Using the data collected and organized on the bar graph, list any improvements or modifications that should be made before this theme is introduced in the classroom.

A NEEDS ASSESSMENT OF A SCIENCE PROGRAM 4.67

(K.W. McCaw, Campbell Collegiate, Regina)

Rationale

To ensure successful innovation and growth, science teachers must be equipped to evaluate their programs and themselves.

Background

The majority of classroom teachers evaluate their programs by "gut feeling" and a sense of connoisseurship which has developed with experience. This evaluation style is useful and effective, but it cannot stand alone.

Dr. Paul Hart, under the auspices of the Saskatchewan Department of Education, has summarized a significant and exhaustive literature review (February, 1987)[5]. From this review a framework for science curriculum development was produced. It is against this framework (*Dimensions of Scientific Literacy*, Figure 1) that science teachers must learn to evaluate their programs.

Introduction

Most program evaluati[illegible]s a preliminary non-evaluative step, that of needs assessment.

Prior to the applicatio[illegible] any of the numerous evaluation schemes, gut feeling included, a systematic reflection on [illegible]alues, objectives, goals, or needs must occur.

How to Conduct an Assessment

Establish a grid or grids to match program objectives with prioritized goals (Figures 2 and 3). The grids are directly analogous to their data tables and have no specified format.

The goals come from the framework previously mentioned (*Dimensions of Scientific Literacy*). There is a significant need to review the Field of Study, or Part B, of Dr. Hart's Framework (February, 1987)[2] to fully understand the goals. However, to provide a nominal view Figure 1 lists the seven broad topics of the Hart framework (bold print) and the great many (numbered) specific literacy factors for each topic. **Nature of Science** will be used as the example in this discussion. The objectives are from sources within the program such as curriculum guides.

There are two broad steps as follows:

1. Prioritize the goals. Figures 2 and 3 have the single word descriptors of the nine literacy factors, which represent the broad topic of the **Nature of Science** (see Figure 1) listed as ranked goals. An example of further clarification available in Dr. Hart's literature for the factors is as follows: "Tentative: It is subject to change and therefore does not purport to be truth in an absolute and final sense. This characteristic does not diminish the value of the knowledge in the eyes of the scientifically literate person" (Part B, February, 1987, p. 6).[2] Two suggestions to simplify and assist with this step are (a) to review Dr. H. Birnie's Goals Kit,[3] which will demonstrate a means to force a ranking of goals in general, although any ranking method is satisfactory, and (b) to assess each broad topic and its associated factors individually, as Figures 2 and 3 show for the **Nature of Science** factors.

2. Establish a grid. This step may be assisted by reviewing the procedure outlined in Dr. Birnie's project manual (Chapter 9, p. 135).[4] However as previously mentioned, the grid format is not specific and merely a visual display of the accumulated data. Personal preference may dictate alternate presentations. Figure 2 is an example grid matching the objectives of Theme I in the Science 10 Curriculum Guide for Division IV with the nine factors groups as the **Nature of Science** in the framework.

rank	1	2	3	4	5	6	7	8	9	
goals (factors)	tentative	public	replicable	probabilistic	humaniastic	historic	unique	holistic	empirical	Totals
number of objectives contributing to each goal	1	3	3	1	-	2	1	-	4	15
percentage of objectives contributing to each goal	6.7	20	20	6.7	-	13.3	6.7	-	26.6	100

FIGURE 2

Figure 3 is a representation of a working grid to record objectives by their identity number as opposed to Figure 2's simple totals. Figure 3 may well precede Figure 2 as an activity. Either Figure 2 or 3 may be used to clarify what are believed to be the focal points of a program and to assess their match to the goals. Of course, the magnitude of the assessment may expand to encompass whole programs, not just one theme. Several grades may be considered to identify the nature of the continuum also suggested in the framework. The limits are established by the time and energy available to the assessor.

rank	1	2	3	4	5	6	7	8	9
goals (factors)	tentative	public	replicable	probabilistic	humaniastic	historic	unique	holistic	empirical
objectives contributing to each goal			1.2			2.4			
		2.3	1.3			2.5			
	1.1	2.4	1.4	2.9			2.1		2.7
									2.8
		2.6							2.10
									2.11

FIGURE 3

5

DATA COLLECTION

In this section of the manual the most common data collection approaches are presented. The specific approaches which are most frequently utilized are described in some detail.

It is expected that those who are going to do an evaluation will **use this Part as a resource guide** for selecting, using, and developing data collection instruments. It is not expected that all users of this manual will need, or want, to read through the entire Part. The assumption is that the school evaluators will be the data collectors.

School staffs or individuals doing evaluations are encouraged to review this Part to see if there are **approaches, techniques,** or **actual examples** of data collection which may prove useful.

The first item sets out the program features or issues which might be evaluated, and provides techniques for collecting data about these features and issues.

The **strengths** and **limitations** of various data collection approaches are described on pages 5.5 - 5.10.

The approaches are followed by six examples (samples) of data collection instruments (5.13-5.21) which are, in turn, followed by instructions for conducting interviews (5.23-5.29) and observations (5.31-5.36).

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AN INITIAL CHECKLIST FOR ACTION

The checklist which follows has been successfully used by the Swift Current School Division to establish a consistent procedure for determining which program features/issues are involved, the sources of the data, and the techniques for collecting the data. In any program evaluation the beginning questions are:

1. What do we want to know? (Which specific programs or issues are of concern?)
2. Whom do we need to involve? (sources of data)
3. How are we going to get the required information? (techniques)

Careful attention to the completion of the initial checklist (see next page) is seen to be an important beginning because it focuses the task of evaluation and defines in "qualitative" terms the evaluation outcome.

How to complete the **Checklist**: for each "row" (teachers, students, inschool administration . . . external evaluation team) (see page 5.6) select the appropriate data collection technique(s) (Checklist, interview . . . samples of work) to use for each program feature or issue. For example:

TEACHERS	2	5		4			6			
	a	b		c			d			

This means you have planned to:

a. Interview teachers to determine if student needs are being met.

b. Review teacher plans (documents) for aims and objectives.

c. Observe instruction.

d. Review teachers' records of test scores for evidence of learning.

DATA COLLECTION APPROACHES: formats, strengths and limitations

5.7

TECHNIQUE – QUESTIONNAIRES

FORMAT	STRENGTHS	LIMITATIONS
Questions which are open-ended	- free response - reasons can be given	- difficult and time comsuing to respond to and score
Checklists	- simple options - easy to interpret	- limited response - only present/absent or yes/no responses
Multiple choice	- provides closure on question - simple options	- limited response - only correct or incorrect responses - limited information on reason for judgment
Ratings	- degree of judgement identified - values can be assigned	- directionality (-/+) confusing - no information on reason for judgment
Rankings	- -provide a norm-referenced approach - easy to develop and use	- can only be used with a limited number of homogeneous topics

TECHNIQUE—CASE STUDY

FORMAT	STRENGTHS	LIMITATIONS
An informed written description of a specific program features(s) that may be generalized to the larger population	- data are qualitative - easy to write - requires fewer staff to participate in the evaluation - collects a broad base of data	- information collected is dependent on the writer - data may be extensive and cumbersome - may be difficult to make an interpretation of the data

TECHNIQUE — RECORDS

FORMAT	STRENGTHS	LIMITATIONS
Data collected from records that have been retained for reporting purposes	- data are factual/objective - useful in making comparisons over time	- records may be inappropriate for evaluation purposes - records may be inaccurate - evaluator must plan for appropriate record keeping prior to the commencement of the program

TECHNIQUE — TESTING (Standardized and Informal)

FORMAT	STRENGTHS	LIMITATIONS
Data are collected by administering test(s) in order to measure the extent of some condition or effect	- data are objective - easy to collect data - data analysis is easier than some other methods (e.g., can be computer scored) - standardized tests are available - comparisons can be made (e.g., norm-referenced tests)	- difficulty in finding tests that are reliable and valid - tests may not relate to educational aims/objectives - tests ignore process - test takers may react poorly

TECHNIQUE — ANALYSIS OF PROGRAM CONTENT

FORMAT	STRENGTHS	LIMITATIONS
Analysis of curriculum and program through the review of curriculum documents/ program guides/textbooks, etc.	- data are readily available in documents - data collected match curriculum planning and implementation - recognizes necessity for a goal-setting orientation	- evaluators must make judgments about the match between the program and appropriate curriculum features - not all curriculum is developed to match pre-determined program features

1. THE QUESTIONNAIRE

STEPS

1. Define questionnaire objectives:

   - list specific objectives to be achieved
   - state specific information that is needed
   - state what you will do with information

   Why? - to make decisions regarding selection of sample
   - to make decisions for constructing questionnaire
   - to make decisions regarding methods of data analysis

2. Select sample:

   - get people who have the information that is needed

   Why? - to obtain accurate information
   - this will influence rate of response

3. Construct questionnaire items:

   - each item must measure a specific aspect of one of your objectives
   - be able to explain **why** the question is being asked and **how** the response will be analyzed

   Types of questions:
   (1) closed form — permits only certain responses
   (2) open form — subject makes any response

   - generally desirable to use closed form so that quantification and analysis of results can be carried out efficiently

   Guide for constructing questions:

   - avoid questions that may be psychologically threatening
   - make an item clear enough to mean the same thing to all respondents
   - use short items rather than long ones
   - avoid negative items (often misread)
   - avoid "double-barreled" items (i.e., question contains more than one idea)
   - avoid technical terms and jargon
   - avoid biased or leading questions

4. Format rules:

   - make questionnaire attractive
   - organize in a logical sequence so that it is easy to complete
   - number items and pages
   - at the beginning and end of the questionnaire indicate to whom the questionnaire is to be returned — provide both name and address
   - include brief, clear instructions in bold type
   - begin with interesting, non-threatening items
   - if a long questionnaire, do not put important items at end
   - include enough information so that items are meaningful

PARENT OPINION INVENTORY*

Parents are asked to respond to each of the following statements. Select the response which best indicates your feelings about the _____ program. We appreciate your feedback on this program as your comments will assist us in making improvements in the program next year. Please complete the form, and return it to the school by _____ at the latest.

Answer each of the following questions by circling the appropriate response. Comments are appreciated.

Strongly Agree SA	Agree A	Disagree D	Strongly Disagree SD

1. The new _____ program is a positive learning experience for my child. SA A D SD

   Comments: _____

   _____

2. My child is demonstrating knowledge of the program at home. SA A D SD

   Comments: _____

   _____

3. My child enjoys the program at school. SA A D SD

   Comments: _____

   _____

4. I am pleased that my child is involved in the _____ program. SA A D SD

   Comments: _____

   _____

5. I look forward to my child continuing in the _____ program next year. SA A D SD

   Comments: _____

   _____

   General Comments: _____

   _____

* from "Program Evaluation Guide," Swift Current School Division, unpublished mimeographed document.

STUDENT OPINION SURVEY (Division II)*

How do you feel about mathematics? Please indicate your feelings by circling **Yes** or **No** to the right of each of the following statements.

This survey is intended to help us improve our mathematics program. Your comments on the program are appreciated.

1. I am enjoying studying mathematics this year.	Yes	No
2. I feel my mathematics skills are improving.	Yes	No
3. I enjoy the mathematics activities in the text/workbook.	Yes	No
4. I wish we had more time in class to work on mathematics.	Yes	No
5. I look forward to learning more mathematics next year.	Yes	No
6. I sometimes do mathematics problems with my parents and friends outside of school.	Yes	No
7. Learning mathematics is easy for me.	Yes	No

If you have any other comments, please list them below.

Comments: .....

.....

.....

*"Program Evaluation Guide", Swift Current.

PRELIMINARY EVALUATION OF NEW MATERIALS

5.17

Date _____

Teacher's name _____ *School* _____

Name of product examined _____

Publisher or supplier _____

Type of learning materials (i.e., reading, film, simulation, etc.)

_____

Course in which the materials might be used _____

1. What ideas, skills, and/or attitudes are the materials likely to foster?

   _____

   _____

   _____

2. Are these appropriate objectives for the course noted above?

   Yes _____ No _____ Not sure _____

3. Do you think the materials will help your students learn the ideas, skills, or attitudes mentioned above?

   Yes _____ No _____

   Why or how? _____

   _____

   _____

4. Do you think the materials can be used in a way students will find interesting?

   Yes _____ No _____ Not sure _____

5. What is it about the product which will interest or motivate students?

   _____

   _____

6. Will the materials be meaningful for all of your students? That is, will the content or format be too difficult? Too easy? Explain.

   _____

   _____

   _____

TEACHER QUESTIONNAIRE FOR EVALUATING NEW MATERIALS AFTER CLASSROOM TRYOUT

5.19

Date _____

Teacher's name _____ *School* _____

Name of product used _____

Publisher or supplier _____

Type of learning materials (i.e., reading, film, simulation, etc.)

_____

Course in which the materials were used _____

1. What ideas, skills, and/or attitudes did the materials likely foster?

_____

_____

_____

2. Are these appropriate objectives for the course noted above?

Yes _____ No _____ Not sure _____

3. How did you use the materials and in what circumstances (e.g., a unit? enrichment? as remedial activities?, etc.)? (Write on reverse side if necessary.)

_____

_____

_____

4. For what percent of the class time did you use the materials? _____

5. How much did you like using the materials? (Comment on the reverse side, if needed.)

_____ Not at all _____ Little _____ Generally _____ Very much

_____

_____

6. If they were available, would you use these materials next year?

Yes _____ No _____ Not sure _____

STUDENT QUESTIONNAIRE FOR EVALUATING NEW MATERIALS* 5.21

Name of materials or activity to be evaluated (supplied by teacher):

_____

Name of course: _____ Name of teacher: _____

Grade _____

Instructions: Please indicate with a check mark (X) the response (A, B, C, or D) which best describes how you feel about the materials we have been using in _____.

1. Compared to the learning materials in your other classes, how interesting was this material or activity?

____ A. Quite a bit less interesting
____ B. Slightly less interesting
____ C. Slightly more interesting
____ D. Quite a bit more interesting

2. Compared to the learning materials in your other classes, how worthwhile was this material or activity?

____ A. Not at all worthwhile
____ B. Generally not worthwhile
____ C. Generally worthwhile
____ D. Quite a bit more worthwhile

3. How much do you think you learned from this material or activity?

____ A. Much more than usual
____ B. A little more than usual
____ C. About the same
____ D. Less than usual

4. Compared to other materials or classroom activities, was it difficult to understand what you were doing?

____ A. Yes
____ B. No
____ C. Not sure

5. Do you recommend that this material or activity be used in this course again next year?

____ A. Yes
____ B. No
____ C. Not sure

6. What do you think was the most important or most useful thing that you learned from this material or activity?

_____

_____

* Anonymous. *Social Education*, November, 1972.

2. THE INTERVIEW

General Principles

A. The interview can be defined as a form of human interaction in which one party (the interviewer) seeks to obtain information from another (the interviewee). The interview is sometimes thought of as an oral questionnaire.

Interviews provide information regarding the ideas of individuals and groups, their perceptions of the ideas of others, and their perceptions of events.

B. **Interview Schedule**

An interview schedule is a written statement of exactly what the interviewer wants to say to a respondent. A typical schedule might include one or all of the following types of questions:

1. Background questions
2. Structured questions
3. Open-ended questions

C. **Conducting the Interview**

- interview should be conducted in private
- interviewer should explain purposes of the interview
- interviewer should be courteous, patient and tactful
- interviewer should remain neutral and nonjudgmental
- interviewer should use a conversational tone of voice and should use language that is compatible with that of the interviewee
- interviewer should try to be consistent and present every question to every subject in exactly the same way
- interviewer should maintain control of the interview
- interviewer should not rush through the interview
- interviewer should ask every question on the schedule
- interviewer should record answers verbatim whenever possible

Specific Suggestions on How to Conduct an Interview

A. **Planning the interview**

Several steps should be taken prior to an interview. The following should be considered:

1. Questions must be planned in advance.

   If possible they should be ordered in such a way as to promote an easy transition from one subject area to the next. In general, it is often best to begin with some small talk and then proceed to basic background information about the respondent. Structured questions on the topic of interest might follow, and the interview could conclude with some open-ended questions.

2. Decide how information will be recorded.

   Sometimes individuals feel inhibited by the presence of a tape recorder; it may be best to take notes during the interview.

4. Decide how many people (and who) will be interviewed. Plan to have a representative number of people from each important group involved with the evaluation issue.

5. Decide how long the interview will last.

6. Schedule interviews, allowing enough time between sessions to check data sheets (or transcripts) for completeness of information.

B. **Conducting the interview**

Greet the respondent in a friendly, relaxed manner. Ensure privacy and confidentiality. Explain purposes. Lead into questioning. Act under the assumption that the respondent will want to provide the needed information.

Maintain a courteous, tactful approach and downplay negative information by being an empathetic listener. Word questions in such a way that the respondent will not be embarrassed. Phrase questions so that the respondent will need to reply in greater depth than a mere "yes" or "no." Cultivate the use of friendly eye contact, the calculated pause, nodding in affirmation to responses, and the use of "I see" and "uh huh" to keep the person talking.

If the respondent tends to wander away from the topic, jot down bits of information that may be useful, and tactfully steer the conversation back to the topic. Do not let the respondent take control of the situation!

Finally, manage the interview. Allow adequate time for each area to be covered. Do not rush through the interview, but also be sure all questions are asked (and answered). When all questions have been asked, invite the respondent to add additional comments which he/she thinks are relevant.

Close on a cordial note, thanking the respondent for his/her time and cooperation.

C. **After the interview**

Check the transcripts **immediately** for legibility and any other areas that might be confusing. If any additional writing needs to be done, do it right away before the content fades from your memory.

Remember: interviewing is an effective way of getting information, but is costly in terms of time. Make sure the interview is the **best** instrument for gathering data before deciding to use it.

STRUCTURED INTERVIEW FOR TEACHERS/IN-SCHOOL ADMINISTRATORS*

5.27

(In this example, "program" means class activities, the text used, other learning materials, i.e., how the curriculum is offered and delivered.)

1. Explain **how instruction is modified** in the classroom to meet individual needs of students.

2. Explain how the **philosophy** of the _____ program meets **the objectives** of the curriculum.

3. Describe how the **activities** within the program meet the **objectives** of the curriculum.

4. Do you have adequate **supplementary resources** and **activities** to facilitate the program? Describe how these supplementary resources and activities **are used** in the program.

*Swift Current School Division

10. Describe your perceptions of how **fellow staff members** and **administration** feel about the program.

11. Describe your **procedures in evaluating** students and reporting to parents.

12. Describe **indicators** that give evidence of student learning as a result of the program.

13. Describe your **feelings about** each of the following program features:

    a) **time allocation**

3. OBSERVATION

Direct observation is a powerful tool for obtaining data for an evaluation. It can:

1. provide valid and reliable information on the performance of students in their normal environment
2. be easily used in a wide variety of situations at all educational levels
3. elicit data in certain areas which would be hard to measure with other instruments (e.g., social development)
4. validate information coming from other sources (e.g., if a series of interviews with parents revealed that playground activities were unusually rowdy, some follow-up observation would be called for)
5. provide both quantitative and qualitative data

Observation as a technique does have certain limitations. Reliability and validity of results are not always ensured, as subjective interpretation of behavior is involved. Certain questions should be asked during both planning and data collection phases:

1. How can an observer be sure that he/she is being consistent in recording data?
2. How can accuracy of interpretation be ensured?

In many studies in psychology and the social sciences, a second observer is used at times, and the two sets of ratings are compared for agreement. If agreement is high, results are said to be **reliable.** If low, obervation techniques or recording sheets need to be reworked until a greater consistency of response is reached. **Validity** of observation results can best be ascertained by checking results against data provided by some other instrument.

Other thoughts to keep in mind when considering the use of observation as a technique:

- it is difficult to obtain objective data about certain behaviors
- in the classroom, many behaviors occur simultaneously, causing difficulty in selecting those which are truly significant
- interpretation may be difficult:
  - context and content of behaviors must be considered
  - an adequate sampling of behaviors must be obtained
  - negative behaviors should not be overemphasized; a realistic balance of positive and negative must be portrayed
- finally, a period of time is required to train an observer

A number of types of instruments may be used for recording observation data. Video- and audiotaping may also be used.

Systematic observation instruments should be able to give the effect of a "snapshot" or "moving picture" of what is going on in a situation.

An example: Spelling — October 23

11:10 Lesson begins. Ms. X asks class to get out their spelling workbooks.
Jason groans, "Not again."
Tracy turns and glares at him.
Students begin placing notebooks on desks. Eric slaps his down so hard it falls into the aisle.
Ms. S: "*Quietly*, class."
Eric smirks and picks up his notebook.

11:11 Ms. X: "Stephanie, will you please write one of this week's words on the board?"
Stephanie writes "completely" on board.
Andrea is waving her hand in the air.
etc.

Observer Comments and Questions

11:10 Question: Would Jason be so likely to talk out of turn if he were sitting in the front of the class?
Comment: Andrea seems especially alert this morning.
Question: Will Ms. X call on the same group of students to write at the board today?
etc.

Reflection and Interpretation

Spelling lesson:

Class morale seemed fairly high today. Despite their usual bids for attention, both Jason and Eric settled down to work. Involving all of the children at the chalkboard seems to help prevent their getting fidgety at their desks. Ms. X called on almost all of the students and was able to give honest praise to some of the lower achievers.

etc.

In addition to the previous examples, numerical ratings may be made of evaluation issues. The pertinent issues are entered on a rating sheet with possible ratings of 1 through 5. Observer(s) rate assessment of performance in those areas.

Planning for Observation

It is important to:

- develop a rapport with those being observed
  - establish reasons for observation
  - help teacher identify the focus of the observations
  - dispel fears
- learn about the teaching-learning situation
- formulate possible questions as a framework for interpreting data
- agree on observation schedule
- indicate the types of instruments to be used.

Establishing a rapport is perhaps the most important step to be taken. It will increase the probability of cooperation. Teachers must feel comfortable if they are to perform their teaching duties as they would in normal circumstances. It should be made clear that observation activities will not interfere in any way during a lesson; this should be helpful in students' acceptance of the observer as a neutral person. Observers should situate themselves in an inconspicuous area in the classroom, yet in a place where they can easily observe all classroom activities.

4. TEST INSTRUMENTS

The source of some data will be scores on various standardized tests. Much of these data will be on file. However, it may be necessary or desirable to select a test from those which are available or to create one for this particular or unique instance.

If it is necessary to select a test from available alternatives, a form somewhat like the one on the next page will assist in the decision-making process.

If it is necessary to create a test, the steps on page 5.37 will prove helpful.

INSTRUMENT DEVELOPMENT PROCEDURE

ACTIVITY	QUESTIONS TO BE ANSWERED AND CAUTIONS
Develop plan	**What information do you need?**
Prepare draft	**Developers should be able to write clearly.** **Prepare more items than will be needed/used in the final draft.** **Provide for a range of difficulty.**
Have several persons review the first draft.	**Are there ambiguities, omissions, and unnecessary pieces of information requested?**
Develop directions for administration.	**Try to assure that data will be collected under standard conditions.**
Develop scoring key.	**Can each part be scored? Is there a standard procedure for scoring?**
Field test and prepare draft including the directions for administration.	**Administer it to persons like those on whom you plan to use it; ask them to react to it; note time estimates for parts and the total test.**
Revise the instrument.	**What were the problems? Can the problems be overcome? What can be left unchanged?**
Repeat review, field-test, and revision steps as necessary.	**Are you satisfied that the information obtained from this instrument will answer the original questions you wanted to have answered in the first item above?**

6

EVALUATION MODELS

This Part provides brief descriptions of common evaluation models/approaches.

It is expected that those who are going to do an evaluation would refer to this section in order to secure some ideas of different ways to design the evaluation they are going to conduct.

It is expected that this section would be read selectively.

CONTENTS OF PART 6

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Appraisal or Accreditation 6.11
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OBJECTIVES-ORIENTED EVALUATIONS

The most common and well-developed of all evaluation approaches are those which compare results with the established objectives.

Some strengths of using objectives as criteria for examining results include the following:

1. The evaluation is reasonably efficient and direct.
2. The result may be a clearer statement of objectives. This may promote improved planning and implementation of the program.
3. Because objectives must to some extent be a part of almost any evaluation, using this approach will likely increase the skill of the evaluators in all settings.

Some weaknesses of this approach are:

1. Limiting an evaluation to only examining the extent to which objectives have been attained may miss other important results. For example, unintended effects may be very important to gain an understanding of the success of a program or program part.

2. Objectives models of evaluations assume:
   a. that the objectives are the correct ones, are attainable, make a difference, etc.
   b. that the program has been operated in a manner which will have allowed the objectives to be achieved.

   One or both of these assumptions may be incorrect.

3. The objectives stated may be exclusively group or individual objectives. For a completely accurate evaluation it may be necessary to have both types of objectives.

I. THE BASIC APPROACH

Steps

1. Establish goals or objectives.

2. Place objectives in broad categories.

3. Analyze objectives to identify and clarify their basic dimensions:
   a. the behavior expected from the student, and
   b. the key content that is to be mastered.

4. Define objectives in behavioral terms.

5. Identify and establish situations and conditions that will give the students a chance to express the behavior related to the content.

6. Explain the purposes of the strategy to the individuals involved.

7. Select or develop appropriate instruments to record or measure the behaviors.

8. Collect performance data (often student performance).

9. Compare the data with the behavioral objectives.

NEEDS ASSESSMENT

A **need** may be defined as a condition in which there is a discrepancy between an acceptable situation and the situation that actually exists. An example would be a difference between the established objectives and what is actually being achieved.

A **needs assessment** refers to an array of procedures for identifying and validating needs and establishing priorities among them. Needs assessment can be applied to objectives, individuals, groups, programs, curricula, instruction, and resources.

Program improvement or curriculum development may begin with an assessment of needs or an attempt to deal with a specific problem. The classroom teacher is likely to be concerned with a specific question such as how certain skills of her students can be improved, or if he is meeting students' needs in terms of developing appropriate future life skills. A high school staff might be concerned with providing a curriculum which adequately prepares its graduates for employment or further education.

The needs assessment process generally is the following:

1. clear identification of the problem need
2. the collection of opinions and data
3. analyzing the data and setting priorities among the needs
4. determining where action is to take place
5. developing an action plan

- brainstorming
- analysis of documents
- reading
- analysis of socioeconomic indicators

III. Set Priorities

1. Ranking of the identified needs. The previous step (II) will likely identify a large number of needs or issues; this is to be expected. The following are techniques which will assist in establishing priorities.

   - **sorting cards:** individual needs statements are put on separate cards that are then given to selected individuals or small groups to rank in order of importance.

   - **rating sheet:** rating sheets are used in the same way as sorting cards.

   - **forced choice:** individuals or groups are to rank a certain number of identified needs as highest or lowest in importance. The total ranked will be a smaller number than the total available.

   - **Delphi:** an intensive interrogation of samples of individuals (often, experts) by means of some sort of questionnaire-type technique:
     - questions are posed;
     - a ranking is provided by each respondent;
     - the intermediary returns the composite to each individual, who is then asked to provide a ranking on the basis of the composite.

     The process can continue to be repeated until the appropriate priorities are set.

   - **Judgmental:** the assessment team members identify the needs as **critical** or **immediate, important** or **desirable.** The resultant list of needs may provide the basis for proceeding with the matters of most importance or immediacy.

IV. Using the Results

1. Substantiate the need, i.e., determine if the need really is a "need"
   - what sort of evidence is there?
   - has a bandwagon passed by?
   - will some kind of treatment or action make a difference?

2. Identify the actors or circumstances
   - is the concern mostly with learners, teachers, administrators, or others?
   - is it a materials and resources matter?
   - is it the curriculum and/or instruction?

3. Identify the probable cause-effect relationship(s)

4. Identify outcomes and objectives

5. Identify alternative strategies

6. Identify resources available

7. Design a course of action in response to the existing need.

Those wishing a more detailed discussion of needs assessment might wish to refer to:

Stufflebeam, Daniel L., et al. (1985). *Conducting educational needs assessments.* Boston: Kluwer-Nijhoff Publishing.

APPRAISAL OR ACCREDITATION

This approach emphasizes judgment in relation to a set of criteria. The judgments are usually made by an expert, a team of experts, or a team of knowledgeable peers who examine the program or program aspect, form an opinion, draw conclusions, and make recommendations. Those making the appraisal may be from within or from outside the school or system.

This model is used extensively in the United States (National Study of School Evaluation) and has been utilized recently in British Columbia and Alberta. The approach is particularly useful when self-evaluation is considered important, when immediate feedback and interpretation are desired, and when interaction between the evaluators and the staff of the program is considered important.

Steps

1. Specify the purpose of the appraisal.

2. Determine who will serve as the members of the appraisal team.

3. Select or develop a set of criteria.
   The effectivenss of this evaluation approach depends upon the competence of the appraisers and the criteria which are used. **Criteria** are "statements which describe what is **good**" — whether this is a program or an aspect of a program. The criteria must be consistent with the educational philosophy and objectives which are representative of what is considered "good" in this setting. These are values that should be achieved.

4. The local program staff, using the criteria and evaluation format, do a self-evaluation. They prepare a formal report of their evaluation.

5. The appraisers, using the same criteria, do an evaluation on-site. They react to the self-evaluation report of the school staff. They prepare an interim report made up of a number of sub-reports.

6. The self-evaluation team and the appraisers meet to clarify impressions and communicate any additional information which is necessary for mutual understanding.

7. The appraisers withdraw from the school and prepare a final report with recommendations. The recommendations are usually of these types:
   - those which can be carried out immediately
   - those which can be carried out in the near future
   - recommendations that may be carried out through long-term planning

8. The local staff act on the recommendations.

Disadvantages of the Model

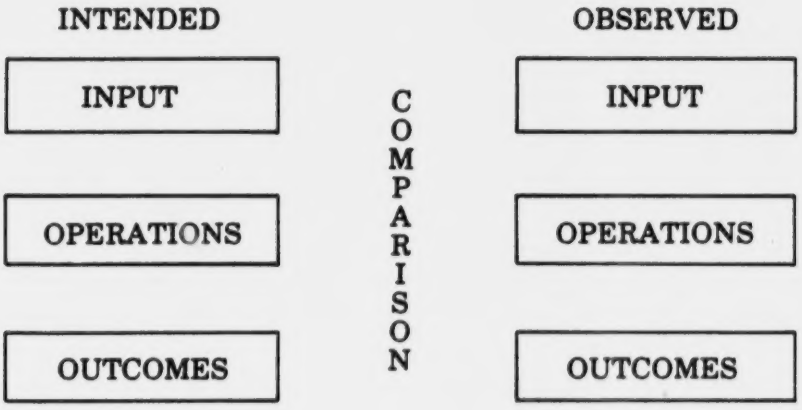
1. Does not include objectives in the affective domain.
2. Clinical or practical components of a program may not be included.
3. May prove to be a costly process.
4. Time consuming, particularly the self-evaluation.
5. Notion of quality is subjective, therefore evaluation teams may vary in their opinion and values.
6. Does not offer comparisons between a program and some similar programs.
7. Team may observe an artificial situation.
8. External judgment may be seen as stifling educational diversity and academic freedom.
9. Base-line standards may have been arbitrarily determined or be incorrect.
10. Students may not have sufficient input.

Those wishing a more detailed discussion of the accreditation model might wish to refer to:

National Study of School Evaluation (1979). *Evaluation criteria* (5th ed.). Washington, DC: N.S.S.E.

JUDGMENT EVALUATION OF INTENTIONS

In this evaluation approach (adapted from Stake, 1967) one first sets out what was **INTENDED** with respect to INPUT factors, how the program was to OPERATE, and what OUTCOMES were expected. Then what was **OBSERVED** with respect to these three (INPUT, OPERATIONS, OUTCOMES) is recorded. Evaluative comparisons are then made:



Steps in the Evaluation

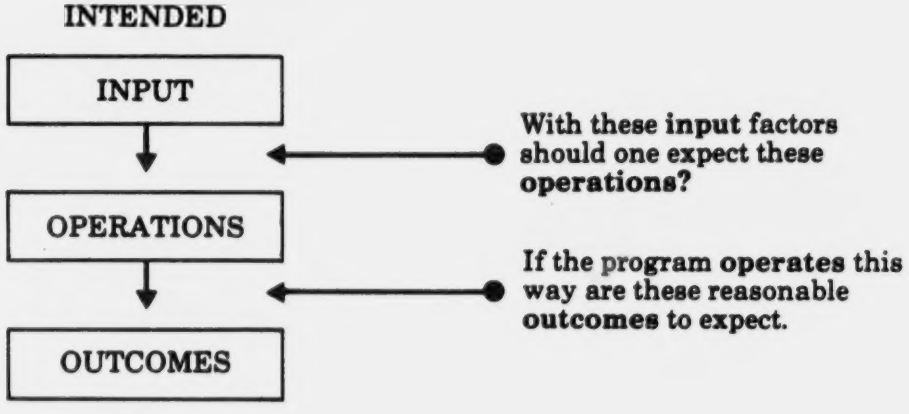
1. The program developers/deliverers list the **intentions** with respect to

   INPUT: e.g., student characteristics; teacher characteristics; previous experiences; pupil-teacher ratio; timetable; materials; resources; etc.

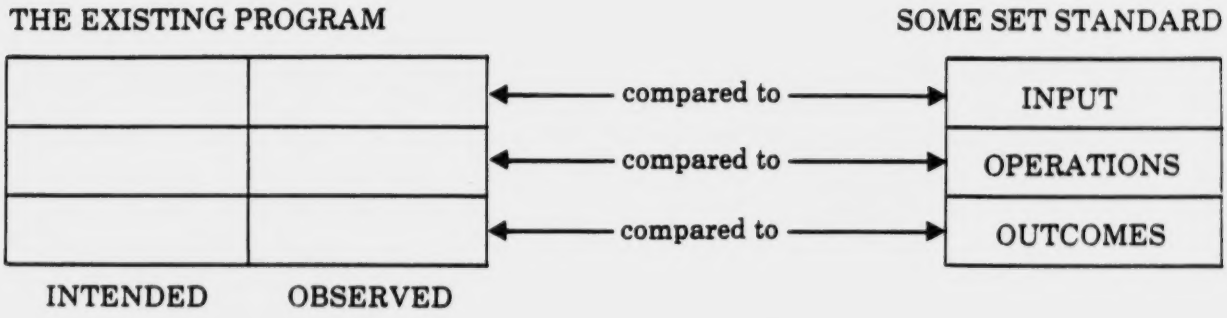
   OPERATIONS: e.g., how scheduled; what instructional approaches and activities; evaluation activities; pupil/teacher interactions; how resources will be used, etc.

   OUTCOMES: e.g., what objectives, attitudes, achievements, impact; wear and tear; effects of learning environment; costs; etc.

2. Consideration is then given to whether there is a **logical** relationship between these **intentions — the first evaluation.**


INTENDED
INPUT
With these input factors should one expect these operations?
OPERATIONS
If the program operates this way are these reasonable outcomes to expect.
OUTCOMES

6. Sometimes it may be desirable to make an evaluative comparison between an existing program and some other standard. This evaluation would look like this.



The evaluation questions would center around the degree to which the **existing program meets or exceeds some standard(s)** such as those of the Department of Education, some well recognized program in another Division, or those of a Subject Council, etc. — **the final evaluation.**

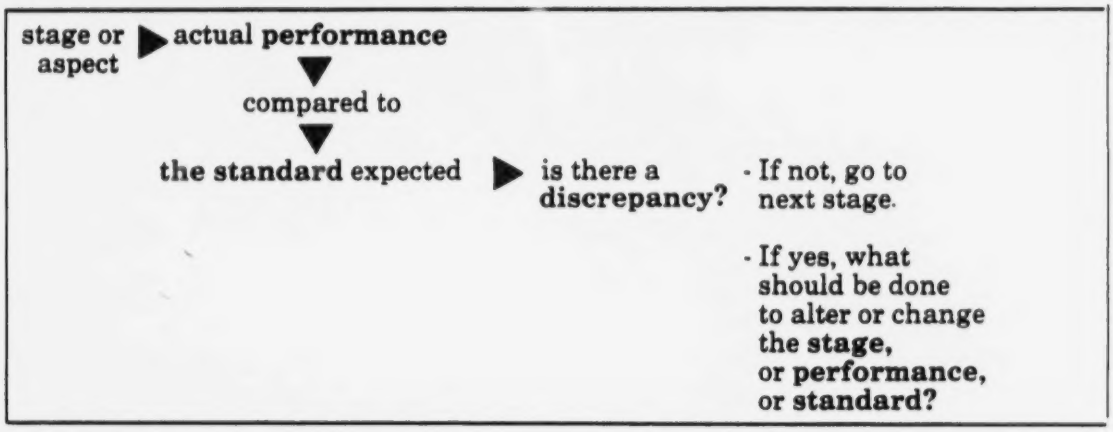
Those wishing a more detailed discussion of this model might refer to:

Stake, Robert E. (1967). The countenance of educational evaluation. *Teachers College Record*, 68, 523-540.

DISCREPANCY EVALUATION

In this approach **standards** are set for each aspect of the activity to be evaluated. In the original evaluation developed by Malcolm Provus, the emphasis was on programming. Provus selected these stages: **design, installation, process** and **product.** However, in this evaluation approach one can have any stages or any aspects which are felt to be appropriate evaluation concerns, and as many or as few stages or aspects as desired.

The actual **performance** at a stage is compared to some **standard** for that stage; one looks for **discrepancies** or areas where improvement is desired. The approach looks like this:


stage or aspect
actual performance
compared to
the standard expected
is there a discrepancy?
- If not, go to next stage.
- If yes, what should be done to alter or change the stage, or performance, or standard?

This approach is particularly useful in
- evaluating pilot projects or new programs
- diagnosing why things **are** or **are not** going well.

Specific steps

1. **Determine** the stages or aspects to evaluate.
2. **Set the standards.** Self-evaluation might be one way to set the desired standards. Possibly the Department of Education or School Division has established standards or objectives. Often writings about the program will set out standards. You might make use of a consultant or expert. In any case, it is necessary at each stage (or for each aspect) to have some standard to which one can compare the level of performance.

   Some stages/aspects may have a number of standards because there are many performances which are to be considered. Or there might be a number of sub-standards which make up a standard.
3. **Compare** how the performance of the stage or aspect matches the standard. Look for evidence of discrepancy and congruence.
4. When discrepancies are identified, determine
   a. why there is a discrepancy,
   b. what corrective actions are possible,
   c. which corrective action(s) is (are) best.
5. Take action. Either
   a. go on to the next step, or
   b. recycle the process after there has been a change in the standards of performance, or
   c. go back to the first stage and start all over, or
   d. terminate the project, or the program, or the evaluation.

Those wishing a more detailed discussion of this model might refer to:

Provus, Malcolm (1971). *Discrepancy evaluation.* Berkeley, CA: McCutchan Publishing.

TRANSACTIONAL EVALUATION

This model is particularly useful in determining beliefs and feelings of those affected by an innovation or change, particularly if the change has come from "outside" the immediate school or school system. Often, if one does not consider the effects of change on the existing system or the people in it, the change may fail. Transactional evaluation is designed to minimize the disruption caused by the reallocation process, the threat the change may pose, and the defensiveness which people may feel.

The process (See diagram on the next page.)

1. One is usually either
   A. dealing with a **new idea,** or
   B. there is (or is to be) some **dysfunction** within the present system.

2a. If A. (**a new idea**)
- The evaluator distributes a detailed descripton of the proposed change to those who will be affected by it.
- Each one is asked to provide an anonymous response indicating what he/she thinks about the change (positive and negative) and questions he/she would like answered.

2b. If B. (**dysfunction**)
- The evaluator asks each person affected to submit an anonymous report on the present system — what is right, what is wrong.

3. Then

3.1 - The responses received become the basis for a questionnaire of scaled responses to the views expressed.

3.2 - The questionnaire is distributed and returned.
- The results are tabulated and returned to the participants.

3.3 - The participants, who likely represent a range of opinions, are brought together to discuss the change. One or more skillful discussion leaders will be necessary at this stage.
- A pilot change or test of the proposed change is proposed.

3.4 - Those who are for the change act as change proponents.
- Those against the change act as critics.
(This should surface the "real" strengths and weaknesses of the proposal before it has its trial.)

3.5 - The pilot is run.

3.6 - All of the participants reevaluate the trial.

3.7 - A decision is made in the light of this reevaluation.

EVALUATION FOR DECISION-MAKING

Often the purpose for doing an evaluation is to provide information which will serve as the basis for making decisions. Improving education requires a balance between knowing what needs to be done and going about making the changes which are necessary. Obtaining and maintaining this balance demands careful decision-making and depends upon an appropriate supply of good evaluative information.

Four types of educational decisions for improvement may be classified as:

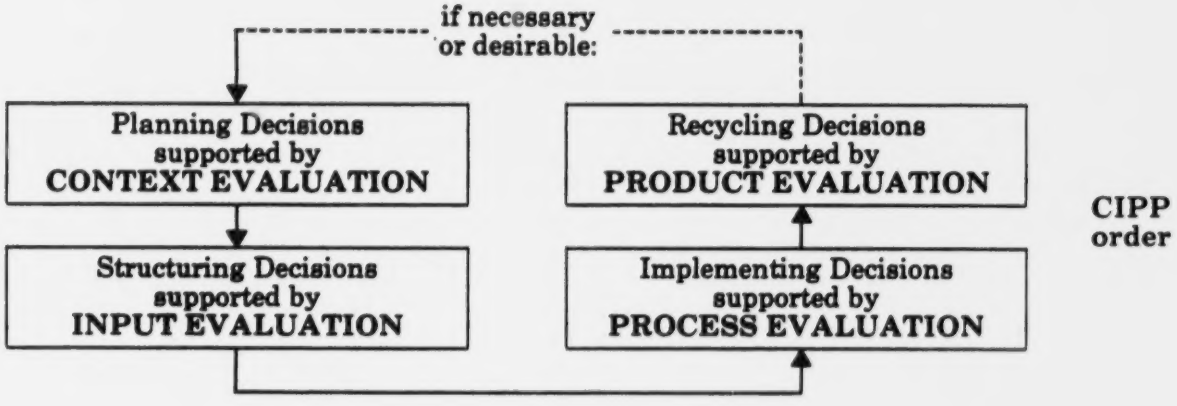
planning decisions
- determining objectives
- focusing upon improvement activities

structuring or designing decisions
- determining the design
  specifying procedures, personnel, facilities, timetabling, etc. for implementing activities

implementing decisions
- directing, utilizing, controlling, and refining implementation procedures and activities

recycling decisions
- continuing, terminating, changing, adapting, etc. the activities.

Each class of decisions in educational improvement requires a relevant kind of evaluation. Although the evaluation types are present in a particular order — **CONTEXT, INPUT, PROCESS, PRODUCT (CIPP)** — the evaluation can start at any one of the four and may deal with only one (or more) type(s) of evaluation. It may be appropriate to start the evaluation with any one class (**C, I, P, or P**) and then proceed to all others in the **CIPP** order (see below).



ADVERSARIAL EVALUATION

The evaluation process in this approach is much like a legal trial, thus the name "adversarial." This is an evaluation model that utilizes obvious arguments "for" and "against" the aspect of program which needs to be evaluated.

Three groups are identified: the two adversary groups and a panel or jury. The adversaries present their cases to the panel; it then makes an evaluation and usually recommends some form of subsequent action. The adversaries would likely be the teachers or administrators affected by or involved with the aspect of program to be evaluated. The panel might include other teachers, administrators, trustees, or other educators, but they should be impartial and possess some degree of expertise with respect to the issue or aspect to be argued and judged.

Steps

1. **Preparation:** Adversaries prepare a case for or against the proposal, partitioning the case into contentions which are logically related to the proposal.

2. **Confrontation:** The adversary teams present each aspect of their cases until all contentions are presented. All contentions are based on one of three issues: need, practicality, desirability.

   As each contention is presented, the opposing adversary cross-examines the other adversary on the value premises underlying that contention, the evidence gathered to support the contention, and the logic employed to support the contention.

   The panel is concerned with these questions concerning the evidence:
   - Is the evidence reliable?
   - Is the evidence complete?
   - Does the evidence present a truthful picture?
   - Was the evidence gathered using appropriate means?

   and the logic of the evidence:
   - Does the logic support the contention?
   - Is the logic internally consistent?
   - Does the logic lead to the conclusion of the adversary?

3. **Resolution:** The panel questions the adversaries in order to gather any additional information needed:

   The chairperson of the panel conducts an open-ended discussion **between** the adversaries.

   An attempt is made to reconcile those views which are not contentious.

4. **Recommendation:** The panel discusses the proceedings with a view to making recommendations and judgments. These evaluations are subsequently presented in a verbal or written report.

An advantage of this approach is that the actual "evaluation" may only take a few hours — the confrontation stage.

Those wishing a more detailed discussion of this model might wish to refer to:

Owens, T. R. (1973). Educational evaluation by adversary proceedings. In E. R. House (Ed.), *School evaluation: The politics and process*. Berkeley, CA: McCutchan Publishing.

Wolf, R. L. (1975). Trial by jury. A new evaluation method. *Phi Delta Kappan*, 57, (November), 185-187.

Not every situation can be evaluated adquately by measuring attainment of goals and objectives, by noting discrepancies, or by using instruments such as questionnaires. Sometimes evaluation purposes require a holistic portrayal of the program. In such instances it is often necessary to view a program in action, not once, but repeatedly, to get a true indication of how the program is working. In instances of this type the case study approach is an appropriate one to use.

A case study is an in-depth study of an individual or group as it operates within its normal context. A case study approach to the evaluation of a program can provide information in the following areas: how it functions; the working interrelationships of program aspects; why or how things happen the way they do in the program; and so on.

The case study makes use of qualitative data collection techniques. An observer (or observers) take(s) note of many (or most) aspects of the program in its natural setting. Information gathered is direct, not filtered through some other person such as the writer of a questionnaire. In this way, unexpected outcomes may be discovered and possibly explained. Many characteristics of a program may be explored, both the overt and the "hard-to-get-at." Doing a case study makes possible a deep, complex understanding of the workings of a program. While findings may not necessarily be generalizable to other settings, they will be right "on target" for the specific situation at hand and will facilitate decision making that is responsive to the program and the needs of program participants and audiences.

While the case study method has many strengths, a few limitations must be mentioned. It can be difficult to conduct, and costly in terms of time:

(a) Normally a case study is carried out for a greater length of time than some other types of evaluations.

(b) Consequently, many more hours of on-site observation are required (because data collection techniques rely heavily on the individual as an instrument). Often an observer sits in on most or all program activities as a participant-observer. Many additional hours may be spent on interviewing and document review.

(c) Finally, because of the sheer bulk of data that is generated by qualitative data gathering techniques, the analysis and interpretation of data may take a great deal of time.

For the sake of efficiency, it makes sense to limit data collection to specific areas. However, in some cases, information is collected on everything about a program and is then organized around "themes" as issues emerge. Difficulties may arise in interpreting the data. To make sure the information is valid, any findings should be cross-checked against other data sources such as test scores, etc.

Despite limitations, the case study can provide a clear and accurate portrayal of program workings. The write-up is usually done in a literary fashion, making the information easily accessible to most readers.

How to do a case study

There are several specific steps which should be taken in order to do a case study. Careful planning in advance and throughout the process will prevent problems as the case study is carried out.

The work involved in a case study can be divided into three stages: the pre-fieldwork stage; the fieldwork stage; and the analysis, verification and synthesis stage.

6. Develop methods for organizing the data. Data may quite likely be of many types, including videotapes and audio cassettes, student work samples, and so on. These various types of data must be organized so that information will be easy to retrieve when it is needed. All of the following should be discussed:
   - categories of data
   - storage systems (i.e., file, index cards, logs, etc.)
   - coding systems: It is possible that some types of data will fit into more than one category; in such cases it will need to be cross-referenced. All data should be coded by date and by category as well. Good coding will facilitate speedy retrieval.
   - a master list which encompasses all of the above. In addition to making retrieval possible and efficient, it will also help evaluators ensure that data have in fact been gathered in all planned and necessary areas.

B. The Fieldwork Stage — involves additional planning, the training of observers and other staff, and the actual data collection.

1. First, staff must be trained. They will need to know what they are expected to do, and how to do it. They may need to be trained in the following areas: observation; interviewing; techniques in unobtrusive data gathering; perhaps videotaping, and so on. Staff will need to know what things to look for, and how to record their findings. Observation sheets and checklists may need to be developed and explained to staff. Finally, staff needs must be considered in terms of the depth of training required, and perhaps in terms of assigning tasks to individuals.

2. The logistics of the fieldwork must be very clearly set out. The following issues should be addressed:
   - who does what
   - scheduling of events
   - types of participation in the field
   - means of recording data
   - ordering all necessary supplies

3. Finally, the data collection stage.

   Data of many types will be collected. Some will arise from direct observation or interview, while other data will be obtained by less obtrusive means such as searching records and documents. For more details on how to observe, how to conduct an interview, how to gather data unobtrusively, see the section on Direct Observation (p. 5.31) and Interviewing Techniques (p. 5.23).

C. The Analysis, Verification, and Synthesis Stage.

The data have all been gathered. Now comes the question of what to do with it (and how).

1. Analyzing data — involves looking through all data categories and searching for emerging issues or themes. You will find that several different types of data may indicate the same idea; this is what is meant by "emerging themes."

   Because data analysis can be quite complicated in the case study, it would simplify matters greatly to develop a worksheet for each evaluation issue. Below the heading (the issue itself), list:
   - types of data gathered (observation, record search, etc.)
   - findings (or summary of findings)
   - which data collection technique(s) unearthed which findings

ILLUMINATIVE EVALUATION

This is not an evaluation model, per se, but rather an evaluative approach to description and interpretation.

The aim is to study a program and determine how it operates, how it is influenced by various school situations, how the participants or users view its advantages and disadvantages (and what they are), how it affects the students, and how it feels to be a participant in the program.

The evaluation also aims to discover the program's most significant features, recurring related events, and critical processes.

In short, it seeks to address and illuminate a complex array of questions. Two concepts are of essential importance in this evaluative approach. These are:

1. **the instructional system** defined as a formalized plan of teaching arrangement — an idealized scheme. For example, team teaching, *Man: A Course of Study*, *Sesame Street*, or programmed learning can all be considered as instructional systems. In order to talk about the implemented instructional system, reference has to be made to the learning situation.

2. **the learning milieu** represents a network of cultural, social, institutional, and psychologial variables. This makes every setting unique and affects the teaching and learning occurring there. An evaluation study should not ignore these factors. Connecting changes in the learning milieu with intellectual experiences of students is also one of the chief concerns for illuminative evaluation. The learning milieu concept is necessary too, for analyzing the interdependence of learning and teaching, and for relating the organization and practice of instruction with the immediate and long-term responses of students.

How the evaluation proceeds

Stages	Methods
1. **Observing** — a period of initial day-to-day observation in order to become completely familiar with the situation (the learning milieu)	1. **Observation** — to build up the "record"
2. **Organizing** — sustained, intense inquiry to determine the common incidents, recurring themes or issues, the repeated discussions	2.1 **Interviews** — to determine perceptions and views of some participants 2.2 **Questionnaires and tests** — to reach a much wider, possibly total, audience of participants or stakeholders
3. **Explaining** — seeking general principles, patterns, causes, and effects	3. **Documentary review and background sources** — to provide the history of the program and its development

The report of the evaluator describes the above information gathering and the progressive focusing upon the instructional system in its milieu, thus "illuminating" the program. The report, more often than not, reads more like a *Macleans* or *Time* cover story rather than as a "report."

CRITICISM AS EVALUATION

Educational criticism is a form of qualitative educational evaluation which takes its lead from the work of critics in the arts. It is assumed that the evaluator is an educational connoisseur — one who is competent enough to be able to pass critical judgments.

The critic creates a rendering of the situation that will provide aspects that are in some way significant. What counts as significant depends on the theories, experience, and values of the critic and upon his purposes. There are two aspects:

1. **The interpretive aspect** of criticism asks

   - What does the situation mean to those involved?
   - How does this _____ operate?
   - What ideas, concepts, or theories can be used to explain its major features?

To answer these, the critic calls upon ideas which account for the events and predicts some of their consequences. To do this the critic must "know" the knowledge to apply and be in a position to determine that a particular instance or situation is one for which certain knowledge is appropriate.

2. **The evaluative aspect** answers the question

   - What is the educational import or value of what is going on?

Recently (1986), a Saskatchewan Division III school which sends its students across the provincial border to a Division IV school wished to know the degree of congruence between its curriculum and that of grade ten in the other province. The external evaluator used the criticism model in this instance. What follows is a brief description of how the evaluation was conducted.

1. Interviews were held with administrators and teachers of both school systems. Data were collected concerning the curricula in place, the characteristics and impressions of students, ethnographic details, statistics and records, etc.

2. Documentary review of curricula of both provinces, yearbooks, school regulations, policy statements and the like.

3. The evaluator, based on his expert opinion, drew conclusions and recommended a course of action with respect to objectives, the curriculum, the student group, and the transfer from one school to the other.

Those wishing a more detailed discussion of this model might wish to refer to:

Eisner, Elliot, W. (1985). Educational connoisseurship and criticism. In George F. Madaus et al. (Eds.). *Evaluation models*. Boston: Kluwer-Nijhoff Publishing, pp. 335-348.

Eisner, Elliot, W. (1985). *The educational imagination* (2nd ed.). New York: Macmillan Publishing Inc.

7

APPENDICES

A. Glossary of Terms 7.3

B. Published Materials 7.5

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- Organizations
- Contact people

D. Bibliography 7.9
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- Other sources

E. Masters for photocopying 7.13

APPENDIX A

GLOSSARY OF TERMS

General:

Accreditation: the process by which approval or status is granted to an educational institution or an individual.

Audiences: all individuals and groups affected by an evaluation, or those who will need to know evaluation results.

Criteria: standards on which a judgment or decision may be based.

Criterion-referenced scores: scores which reflect a student's or a group's attainment of specific objectives, or standard(s). These scores do not reflect a student's or group's performance relative to other students or groups.

Discrepancy evaluation: a type of evaluation in which the performance of a group, individual, or thing on certain program aspects is compared to standards which have been set for those same aspects. Discrepancies are noted and considered in making program changes.

Formative evaluation: an evaluation process that is ongoing throughout the development of a program, a curriculum, or materials. Feedback is given during the developmental process, making it possible to create the best possible product.

Goal free evaluation: an evaluation approach in which an evaluator assesses a situation independently of stated goals and objectives.

Instruments: devices or methods used for collecting data (evaluation information).

Needs assessment: a preliminary evaluation process in which the needs of a group, or curriculum, or program are determined.

Norm-referenced scores: scores which reflect the performance of a student or a group as compared to other students or groups. Most standardized test scores are norm-referenced and show a student's or group's performance in terms of percentiles.

Objectives evaluation: an evaluation approach which examines the performance of groups or processes in terms of attainment of stated objectives.

Program: some organized aspect of the school experience which may range from a highly specific, individualized situation to a broad context such as a curriculum.

Qualitative evaluation methods: methods which do not rely solely on numerical scores for the assessment of a program or situation.

Quantitative evaluation methods: methods which make use of instruments that provide numerical scores for the assessment of a program or situation.

Reliability: the tendency of a result or a score to be consistent in more than one situation. Reliability can refer to consistency between groups, or the same group(s) at different times, or between different observers of the same situation.

Standard: some established level of performance, against which the performance of a group, process, or thing may be compared.

APPENDIX B

PUBLISHED MATERIALS

The *Assessing your school* pamphlets published by the B.C. Ministry of Education contain evaluation guidelines and data sheets:

Assessing your school: A handbook for elementary school staffs
Assessing your school: Curriculum
Assessing your school: Library and other resource services
Assessing your school: Philosophy and goals
Assessing your school: Pupil assessment, promotion policy, placement procedures, and reporting
Assessing your school: Pupil support services
Assessing your school: School and community
Assessing your school: School facilities
Assessing your school: School staff and administration

(Ministry of Education, Parliament Buildings, Victoria, British Columbia, V8V 2M4)

The National Study of School Evaluation (NSSE) publishes several sets of evaluative criteria and evaluation guidelines intended for all aspects of school life. These are used widely throughout the U.S. for accreditation purposes. Some of these materials include:

Elementary school evaluative criteria, second edition (1981)
Evaluative criteria, fifth edition (1979)
Evaluative criteria for the evaluation of secondary schools (1978)
K-12 school evaluative criteria (1983)
Middle school/junior high evaluative criteria (1979)

(NSSE, 5201 Leesburg Pike, Falls Church, Virginia, 22041)

A straightforward, step-by-step guide to evaluating at the school level:

Owens, Thomas R., and Evans, Warren D. (1977). *Program evaluation skills for busy administrators.* Oregon: Department of Education.

(State Department of Education, Salem, Oregon, 94602)

Produced by the Alberta Department of Education:

Rhodes, H.C., and Lomas, C.A.H. (1972). *Evaluation guidelines.* Alberta: Alberta Department of Education.

(Alberta Education, 11160 Jasper Avenue, Edmonton, Alberta, T5K 0L2)

Two guidebooks produced by the Treasury Board of Canada, Comptroller General.

Guide on the program evaluation function (1981). Catalogue Number: BT 32-16/1981, ISBN 0-662-51385-1.
Principles for the evaluation of programs by federal departments and agencies (1981). Catalogue Number: BT 66-2/1981, ISBN 0-662-52594-3.

(Supply and Services Canada, 1406-2500 Victoria Avenue, Regina, Saskatchewan, S4P 3X2)

APPENDIX C

RESOURCES

Departments of Education (as of July 1987)

Department of Education
2220 College Avenue
Regina, Saskatchewan, S4P 3V7
Attention: Susan Winter
(306) 787-6030

Alberta Education
11160 Jasper Avenue
Edmonton, Alberta, T5K 0L2
Attention: W.E. Hathaway, Associate Director
Planning Services
(403) 427-8218

Ministry of Education
Parliament Buildings
Victoria, British Columbia, V8V 2M4
Attention: Rob E. J. Watson, Assistant Director
Field Operations Branch
(604) 387-4611

Organizations

Canadian Evaluation Society
170 Metcalfe Street
Suite 601
Ottawa, Ontario, K2P 1P3

American Evaluation Association
9555 Persimmon Tree Road
Potomac, Maryland 20854
(202) 275-4001

National Study of School Evaluation
5201 Leesburg Pike
Falls Church, Virginia 22041
(703) 820-2727

Contact people

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College of Education
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Saskatoon, Saskatchewan, S7N 0W0
(306) 966-7567

Dr. J.O. Burgess
Faculty of Education
University of Regina
Regina, Saskatchewan, S4S 0A2
(306) 584-4603

Mr. B. Krynowsky
Saskatoon, S.D. No. 13
405 - 3rd Avenue S.
Saskatoon, Saskatchewan, S7K 1M7
(306) 244-2211

Dr. A. Ryan
College of Education
University of Saskatchewan
Saskatoon, Saskatchewan, S7N 0W0
(306) 966-7594

APPENDIX D

BIBLIOGRAPHY

Annotated bibliography

Anderson, S. (1975). *Encyclopedia of educational evaluation: Concepts and techniques for evaluating education and training programs.* San Francisco: Jossey-Bass Publishers.

An extremely useful guide containing articles dealing with every aspect of evaluation.

Burgess, J.O. (1986). *Assessment of the congruency of the Creighton School Division III curriculum with the curriculum in Manitoba for grades nine and ten.* Regina: Saskatchewan Instructional Development and Research Unit.

An example of a local curriculum evaluation project.

DeRoche, Edward F. (1981). *An administrator's guide for evaluating programs and personnel.* Boston: Allyn and Bacon Inc.

An outstanding reference; provides guidelines for the evaluation of most aspects of school life.

Fink, Arlene, and Kosekoff, Jacqueline (1978). *An evaluation primer.* Beverly Hills, CA: Sage Publications.

Although not geared specifically toward the evaluation of school programs, this concise guide answers many questions about the "whys" and "how tos" of evaluation in a readable manner.

Fitz-Gibbon, Carol Taylor, and Morris, Lynn Lyons (1978). *How to design a program evaluation.* Beverly Hills, CA: Sage Publications.

This detailed book provides a concise, in-depth discussion of a variety of experimental design strategies. For the reader with some prior knowledge of research methodology.

Hamilton, D., et al. (1977). *Beyond the numbers game.* London: Macmillan Education.

This thought-provoking book contains a number of articles written by experts in qualitative evaluation techniques.

Statistical references

For the individual with no training in statistics:

Popham, W.J. (1967). *Educational statistics, use and interpretation.* New York: Harper and Row, Publishers.

Rippey, Robert M. (ed.) (1975). *Studies in transactional evaluation.* Berkeley, California: McCutchan Publishing Corporation.

Scriven, Michael (1974). Educational perspectives and procedures, in W. James Popham (ed.), *Evaluation in education: Current applications.* Berkeley, California: McCutchan Publishing Corporation, pp. 34-93.

Stake, Robert E. (1967). The countenance of educational evaluation. *Teachers College Record*, 68, pp. 523-540.

Stufflebeam, Daniel L. et al. (1985). *Conducting educational needs assessments.* Boston: Kluwer-Nijhoff Publishing.

Stufflebeam, Daniel L. & Shinkfield, Anthony J. (1985). *Systematic evaluation.* Boston: Kluwer-Nijhoff Publishing.

Taylor, Peter A. & Cowley, Doris M. (eds.) (1972). *Readings in curriculum evaluation.* Dubuque, Iowa: William C. Brown Company, Publishers.

TenBrink, Terry D. (1979). *Evaluation: A practical guide for teachers.* New York: McGraw-Hill Book Company.

Wolf, R.L. (1975). Trial by jury. A new evaluation method. *Phi Delta Kappan*, 57 (November), pp. 185-187.

Worthen, Blaine R. & Sanders, James R. (1973). *Educational evaluation: Theory and practice.* Worthington, Ohio: Charles A. Jones Publishing Company.

APPENDIX E

MASTERS FOR PHOTOCOPYING

What is to be evaluated?

	NO	YES	PARTIALLY	NOT SURE
- Is it a part of the school program at the school division level?	____	____	____	____
- Is it an aspect of the program of more than one school?	____	____	____	____
of only one school?	____	____	____	____
of more than one grade?	____	____	____	____
of more than one classroom?	____	____	____	____
of only one classroom?	____	____	____	____
- Is it a curriculum area?	____	____	____	____
- Is it some aspect of instruction?	____	____	____	____
if YES or PARTIALLY, are teachers the primary personnel?	____	____	____	____
or is it primarily students?	____	____	____	____
or both?	____	____	____	____
- Is it materials?	____	____	____	____
if YES, what type? ____				
- Is it some other aspect of program?	____	____	____	____
can you describe it or name it?	____	____	____	____
- (add any other questions which will help identify what is to be evaluated)	____	____	____	____

The specific object of the evaluation is _____

_____

_____

_____

(transfer this to the next worksheet)

Describing the Specific Object of the Evaluation

The object from the previous page.	
Describe where it exists. (division, school, classroom?)	
How long has it been a part of the school's program?	
Who is currently working with/in this program?	
What are its objectives?	
Describe how it operates, or performs, or is used.	

WHO WILL BE INTERESTED? (WHAT AUDIENCES?)

	IN WHAT WAY	ABOUT WHICH ISSUES
IN THE DIVISION?		
IN THE SCHOOL(S)?		
IN THE CLASSROOM(S)?		
IN THE COMMUNITY?		
BEYOND THE COMMUNITY?		

RESOURCES

ITEM	CHECK AVAILABLE	NEEDED	HOW USED?

EVALUATION WORK PLAN

Evaluative Questions or Objectives	Information Required	Source of Information	Method for Collecting Information	Information Collection Arrangements			Analysis of Information	Reporting Information		
				By Whom	Conditions	When		To Whom	How	When

PROGRAM EVALUATION CHECKLIST

TECHNIQUES FOR COLLECTING DATA

1. Checklist (Rating Scales)
2. Interview (Structured & Unstructured)
3. Narrative/Anecdotal Comments
4. Observation of Teachers/Students
5. Records/Documents/ Reports
6. Testing (Standardized Criterion Referenced and Informal)
7. Analysis of Program Content
8. Case Study
9. Samples of work

SOURCES OF DATA	PROGRAM FEATURES/ISSUES	MEETING STUDENT NEEDS	CLEAR AIMS AND OBJECTIVES	APPROPRIATE SCOPE AND SEQUENCE	EFFECTIVE INSTRUCTION	STAFF DEVELOPMENT PROVISIONS	ATTITUDE TOWARD PROGRAMS	EVIDENCE OF STUDENT LEARNING	RESOURCES	LOGISTICS
TEACHERS										
STUDENTS										
IN-SCHOOL ADMINISTRATION										
SENIOR ADMINISTRATION										
COORDINATORS										
TRUSTEES										
EXTERNAL EVALUATION TEAM										

EVALUATING LEARNING MEDIA*

Directions

Study the format of this instrument; then rate each item using the following scale:

0 1 2 3 4

Circle the one number which identifies your evaluation of the item. The scale extends upward from 0 to 4.

0 = totally lacking
1 = poor
2 = fair
3 = good
4 = excellent

If an item requires a "YES" or "NO" answer, circle the number 4 to answer "YES"; circle 0 to answer "NO".

After completing the questionnaire, add all circled numbers in each category and obtain an average for each category. The averages are to be used in completing the profile chart at the end of the questionnaire.

I. Local Planning

To what extent:

1. has a media planning committee been established?	0	1	2	3	4
2. is the library/media program considered when the school system plans for facilities, staff, budget, and curriculum?	0	1	2	3	4
3. are the school board and administration aware of the value of a strong media program in areas such as the following:					
a. financing	0	1	2	3	4
b. scheduling for maximum use of the media centre	0	1	2	3	4
c. others	0	1	2	3	4
4. has a policy been developed regarding all program components, such as:					
a. selection	0	1	2	3	4
b. programming	0	1	2	3	4
c. operations	0	1	2	3	4
d. others	0	1	2	3	4
Other evaluation questions that you want to ask	0	1	2	3	4

Determine the average for this category by dividing the total of the circled numbers in the category by the number of items in the category.

(Total _____ ; Average _____)**

*Adapted from: *Program Assessment Instrument, Educational Media K-12*, (1981), State Department of Education, Raleigh, North Carolina, as cited in *Program Description: Educational Media* (draft, no date), Division of Planning and Accreditation, North Carolina Department of Public Instruction.

**Place the "Average" on the chart on page 5.

IV. Staffing

To what extent:

1. does the school employ a fully qualified teacher-librarian? (circle 4 if answer is yes; 0 if no)	0	1	2	3	4
number of hours per week _____					
2. does the school employ trained library technicians?	0	1	2	3	4
number of hours per week _____					
3. does the school employ teacher-aides/library clericals in the library?	0	1	2	3	4
number of hours per week _____					
4. is volunteer assistance available?					
parents	0	1	2	3	4
number of hours per week _____					
students	0	1	2	3	4
number of hours per week _____					
5. is training available for volunteers?					
parents	0	1	2	3	4
students	0	1	2	3	4
6. are inservice and staff development activities made available to:					
a. teacher-librarians	0	1	2	3	4
b. library technicians	0	1	2	3	4
c. other library staff	0	1	2	3	4
d. other interested teachers	0	1	2	3	4

(other evaluation questions you need to ask)

Determine the average for this category by dividing the total of the circled numbers in the category by the number of items in the category.

(Total _____ ; Average _____)**

V. Instruction

To what extent:

1. do classroom teachers and teacher-librarians work together in the planning of instructional sequences?	0	1	2	3	4
2. are a variety of teaching/learning strategies employed in order to achieve instructional goals in the library program?	0	1	2	3	4
3. are individual students' learning styles considered when planning lessons?	0	1	2	3	4
4. are students encouraged to use a variety of resource materials in completing assignments?	0	1	2	3	4
5. are students given the opportunity to use library, learning, and research skills in all curriculum areas?	0	1	2	3	4

Determine the average for this category by dividing the total of the circled numbers in the category by the number of items in the category.

(Total _____ ; Average _____)**

**Place the "Average" on the chart on page 5.

Transfer the averages from each section of the questionnaire to the appropriate blanks below:

Category	Average
I. Local Planning	_____
II. Program Learning Outcomes	_____
III. Organization	_____
IV. Staffing	_____
V. Instruction	_____
VI. Physical Resources	_____
VII. Financing	_____

Profile Chart

Darken each column from the bottom up to the level which indicates the average obtained for that category.

Category	I Planning	II Program	III Organiza-zation	IV Staffing	V Instruc-tion	VI Physical Resources	VII Financing
4							
3							
2							
1							
0							

Scale

Plan of Action

1. Areas of strength:
2. Areas needing improvement (in rank order):
3. Strategies needed to improve media program:
4. Short-range plans:
5. Long-range plans:

EVALUATION OF AN ORGANIZATIONAL DESIGN USING THEME TEACHING

Check either "YES" or "NO" in response to the following questions. If response is YES then circle a number of the 5 point scale provided indicating the degree of the YES. Use the following key as a guide:

1 - LOW RATING (1-29%)
2 - BELOW AVERAGE RATING (30-49%)
3 - AVERAGE RATING (50-69%)
4 - SLIGHTLY ABOVE AVERAGE RATING (70-85%)
5 - SIGNIFICANTLY ABOVE AVERAGE RATING (86-100%)

If the response is "NO" merely check in the space provided.

SECTION A. Is the theme pertinent to the age group of learners involved?

1.	within the learners' realm of interest?	**	YES ☐ NO ☐	1	2	3	4	5
2.	applicable to the learners' world?		YES ☐ NO ☐	1	2	3	4	5
3.	to be presented in an understandable manner?		YES ☐ NO ☐	1	2	3	4	5
4.	of benefit to the learner?		YES ☐ NO ☐	1	2	3	4	5

SECTION B. During the planning phase has there been input:

5.	from the students?	**	YES ☐ NO ☐	1	2	3	4	5

SECTION C. Within the instructional framework is there provision for:

6.	individual differences?	**	YES ☐ NO ☐	1	2	3	4	5
7.	group work?		YES ☐ NO ☐	1	2	3	4	5
8.	teacher instruction?		YES ☐ NO ☐	1	2	3	4	5
9.	pupil initiated instruction?		YES ☐ NO ☐	1	2	3	4	5
10.	independent learning?		YES ☐ NO ☐	1	2	3	4	5
11.	teacher assisted learning?		YES ☐ NO ☐	1	2	3	4	5
12.	peer assisted learning?		YES ☐ NO ☐	1	2	3	4	5

*Transfer information for these sections to the bar graph on page 4.

SECTION G.

Do provisions in planning and content allow for inegration of the following subject areas?

Is the allocation of time appropriate according to the specifications of the Core Curriculum?

Planning/Content Integration								Time Allocation						
27.**	YES ☐ NO ☐	1	2	3	4	5	Language Arts	28.**	YES ☐ NO ☐	1	2	3	4	5
29.	YES ☐ NO ☐	1	2	3	4	5	Mathematics	30.	YES ☐ NO ☐	1	2	3	4	5
31.	YES ☐ NO ☐	1	2	3	4	5	Science	32.	YES ☐ NO ☐	1	2	3	4	5
33.	YES ☐ NO ☐	1	2	3	4	5	Social Studies	34.	YES ☐ NO ☐	1	2	3	4	5
35.	YES ☐ NO ☐	1	2	3	4	5	Arts Education	36.	YES ☐ NO ☐	1	2	3	4	5
37.	YES ☐ NO ☐	1	2	3	4	5	Physical Education/ Health	38.	YES ☐ NO ☐	1	2	3	4	5

**Transfer information for these sections to the bar graph on page 4.

PARENT OPINION INVENTORY*

Parents are asked to respond to each of the following statements. Select the response which best indicates your feelings about the _____ program. We appreciate your feedback on this program as your comments will assist us in making improvements in the program next year. Please complete the form, and return it to the school by _____ at the latest.

Answer each of the following questions by circling the appropriate response. Comments are appreciated.

Strongly Agree SA	Agree A	Disagree D	Strongly Disagree SD

1. The new _____ program is a positive learning experience for my child. SA A D SD

   Comments: _____

   _____

2. My child is demonstrating knowledge of the program at home. SA A D SD

   Comments: _____

   _____

3. My child enjoys the program at school. SA A D SD

   Comments: _____

   _____

4. I am pleased that my child is involved in the _____ program. SA A D SD

   Comments: _____

   _____

5. I look forward to my child continuing in the _____ program next year. SA A D SD

   Comments: _____

   _____

   General Comments: _____

   _____

* from "Program Evaluation Guide," Swift Current School Division, unpublished mimeographed document.

STUDENT OPINION SURVEY (1 - 3)
(Teachers are asked to assist students in filling out this form.)

Please tell us how you feel about the reading program by circling the YES or NO face.

1. I am enjoying reading this year. YES NO

2. My reading is improving. YES NO

3. I wish we had more time to spend on reading. YES NO

4. I look forward to reading longer stories next year. YES NO

5. Sometimes I read at home, just for fun. YES NO

6. Sometimes I talk about reading with my family and friends. YES NO

7. Reading is easy for me. YES NO

STUDENT OPINION SURVEY (Division II)*

How do you feel about mathematics? Please indicate your feelings by circling **Yes** or **No** to the right of each of the following statements.

This survey is intended to help us improve our mathematics program. Your comments on the program are appreciated.

1. I am enjoying studying mathematics this year.	Yes	No
2. I feel my mathematics skills are improving.	Yes	No
3. I enjoy the mathematics activities in the text/workbook.	Yes	No
4. I wish we had more time in class to work on mathematics.	Yes	No
5. I look forward to learning more mathematics next year.	Yes	No
6. I sometimes do mathematics problems with my parents and friends outside of school.	Yes	No
7. Learning mathematics is easy for me.	Yes	No

If you have any other comments, please list them below.

Comments: .....

.....

.....

*"Program Evaluation Guide", Swift Current.

PRELIMINARY EVALUATION OF NEW MATERIALS

Date _____

Teacher's name _____ *School* _____

Name of product examined _____

Publisher or supplier _____

Type of learning materials (i.e., reading, film, simulation, etc.)

_____

Course in which the materials might be used _____

1. What ideas, skills, and/or attitudes are the materials likely to foster?

   _____

   _____

   _____

2. Are these appropriate objectives for the course noted above?

   Yes _____ No _____ Not sure _____

3. Do you think the materials will help your students learn the ideas, skills, or attitudes mentioned above?

   Yes _____ No _____

   Why or how? _____

   _____

   _____

4. Do you think the materials can be used in a way students will find interesting?

   Yes _____ No _____ Not sure _____

5. What is it about the product which will interest or motivate students?

   _____

   _____

6. Will the materials be meaningful for all of your students? That is, will the content or format be too difficult? Too easy? Explain.

   _____

   _____

   _____

TEACHER QUESTIONNAIRE FOR EVALUATING NEW MATERIALS AFTER CLASSROOM TRYOUT

Date _____

Teacher's name _____ *School* _____

Name of product used _____

Publisher or supplier _____

Type of learning materials (i.e., reading, film, simulation, etc.)

_____

Course in which the materials were used _____

1. What ideas, skills, and/or attitudes did the materials likely foster?

   _____

   _____

   _____

2. Are these appropriate objectives for the course noted above?

   Yes _____ No _____ Not sure _____

3. How did you use the materials and in what circumstances (e.g., a unit? enrichment? as remedial activities?, etc.)? (Write on reverse side if necessary.)

   _____

   _____

   _____

4. For what percent of the class time did you use the materials? _____

5. How much did you like using the materials? (Comment on the reverse side, if needed.)

   _____ Not at all _____ Little _____ Generally _____ Very much

   _____

   _____

6. If they were available, would you use these materials next year?

   Yes _____ No _____ Not sure _____

STUDENT QUESTIONNAIRE FOR EVALUATING NEW MATERIALS*

Name of materials or activity to be evaluated (supplied by teacher):

_____

Name of course: _____ Name of teacher: _____

Grade _____

Instructions: Please indicate with a check mark (X) the response (A, B, C, or D) which best describes how you feel about the materials we have been using in _____ .

1. Compared to the learning materials in your other classes, how interesting was this material or activity?

___ A. Quite a bit less interesting
___ B. Slightly less interesting
___ C. Slightly more interesting
___ D. Quite a bit more interesting

2. Compared to the learning materials in your other classes, how worthwhile was this material or activity?

___ A. Not at all worthwhile
___ B. Generally not worthwhile
___ C. Generally worthwhile
___ D. Quite a bit more worthwhile

3. How much do you think you learned from this material or activity?

___ A. Much more than usual
___ B. A little more than usual
___ C. About the same
___ D. Less than usual

4. Compared to other materials or classroom activities, was it difficult to understand what you were doing?

___ A. Yes
___ B. No
___ C. Not sure

5. Do you recommend that this material or activity be used in this course again next year?

___ A. Yes
___ B. No
___ C. Not sure

6. What do you think was the most important or most useful thing that you learned from this material or activity?

_____

_____

* Anonymous. *Social Education*, November, 1972.

CRITERIA FOR EVALUATING A TEXTBOOK, A TEXTBOOK SERIES or for COMPARING SERIES

A WAY TO EVALUATE A TEXTBOOK OR STUDENT MATERIALS WHEN THERE IS AN ARRAY OF OPTIONS

Our school received permission to develop and offer an optional program in Agriculture for the Middle Years (grades 6, 7 and 8). Now we have to make some decision about student materials. Because there are so many materials available it is going to be necessary to evaluate the options we have:

- *Are there enough materials to allow us to present this program without having a student textbook? or*
- *Is there a single text which could be used for each year of the program? or*
- *Do we select a series of textbooks? and*
- *How might we make a decision when there is more than one textbook? more than one series?*

The following format is one that may be used when evaluating a number of textbooks in order to reach a decision about which one(s) to use.

CURRICULUM AREA: _____

EVALUATED FOR GRADE: _____

OPTION 1

Author(s)/Editor(s): _____

Title: _____

Series: _____

Publisher: _____

Canadian Distributor: _____

Publication date: _____ Edition: _____

OPTION 2

Author(s)/Editor(s): _____

Title: _____

Series: _____

Publisher: _____

Canadian Distributor: _____

Publication date: _____ Edition: _____

OPTION 3

Author(s)/Editor(s): _____

Title: _____

Series: _____

Publisher: _____

Canadian Distributor: _____

Publication date: _____ Edition: _____

III. **Philosophy**

A.	Does the content reflect the needs, interests, and values of the community? (Score 2)	2	___	___	___
B.	Is the text compatible with the philosophical approach of the _____ curriculum? (Score 2)	2	___	___	___

Comments: _____

_____

IV. **Content**

A.	Does the text/series give comprehensive coverage to all important topics in this subject area? (for example, Health)				
	1. Health knowledge, attitudes, decisions, and behavior. (Score 2)	2	___	___	___
	2. Mental and social health. (Score 2)	2	___	___	___
	3. Growth and development. (Score 2)	2	___	___	___
	4. Safety and first aid. (Score 2)	2	___	___	___
	5. Disease and disorders. (Score 2)	2	___	___	___
	6. Nutrition. (Score 2)	2	___	___	___
	7. Environment. (Score 2)	2	___	___	___
	8. Health information, products, and services. (Score 2)	2	___	___	___
	9. Dependency-causing substances. (Score 2)	2	___	___	___
	10. Health organizations. (Score 2)	2	___	___	___
	11. Health and the future. (Score 2)	2	___	___	___
B.	Is the content accurate and authentic? Are information sources documented? Is it current? (Score 3)	3	___	___	___
C.	Is the content logically developed? Is organization consistent? (Score 3)	3	___	___	___
D.	Can this material be used to discourage stereotypic views and biases toward diverse human attributes, conditions, attitudes and/or behaviors (e.g., sex role, ethnic, racial stereotyping)? (Score 1)	1	___	___	___

Comments: _____

_____

VI. **Treatment**

A.	Is the text/series suitable for all pupils in the classroom? (Score 3)	3	___	___	___
B.	Can the text/series be easily implemented in a multigrade classroom? (Score 2)	2	___	___	___
C.	Is the sentence structure suitable to the maturity level of students? (Score 3)	3	___	___	___
D.	Is the vocabulary appropriate for the reading level of the students? (Score 3)	3	___	___	___
E.	Is the material adaptable to individual differences? (Score 2)	2	___	___	___
F.	Are alternate resources available or suggested? (Score 1)	1	___	___	___
G.	Are levels of abstraction appropriate for the students? (Score 3)	3	___	___	___
H.	Is the interest level appropriate for the students? (Score 3)	3	___	___	___
I.	Does the text/series use full-color photographs and drawings as an integral part of the content presentation? (Score 3)	3	___	___	___

Comments: _____

_____

VII. **Review and Evaluation**

A.	Does the text/series have a page of review questions and exercises, and a page of test questions at the end of each chapter? (Score 2)	2	___	___	___
B.	Does the text/series have a summary of important points at the end of each chapter? (Score 1)	1	___	___	___
C.	Does the text/series have at the beginning or end of each chapter a listing of terms introduced in the chapter, to help introduce vocabulary and make reading easier? (Score 1)	1	___	___	___
D.	Is the text/series accompanied by independent test booklets with answer keys? (Score 2)	2	___	___	___

Comments: _____

_____

X. **Cost**

A. Is the cost realistic for the school? For the students who will be using it? (Score 3) 3 ___ ___ ___

B. Is the cost worth the use that will be made of the text/series? (Score 3) 3 ___ ___ ___

Comments: _____

_____

TOTALS 125 ___ ___ ___

General Impressions: _____

_____

_____

Which option do you feel would be most suitable for use in the _____ program?

For which grades? _____

Comments: _____

_____

_____

Instructions

Please critique your inservice activity using the guidelines below. On the LEFT side of the questionnaire, please rate the extent to which the guideline was followed. On the RIGHT side of the questionnaire, please indicate how important this issue is to you.

Circle one						Check one		
Not Applicable	Not at All	Partially	Mostly	Totally		Not Important	Undecided	Important
					1. Teachers participated in the inservice program on a voluntary basis.	-	-	-
1	2	3	4	5	2. Were the requirements, needs, and preferences as described by teachers used as the starting point of all inservice activities?	-	-	-
1	2	3	4	5	3. Was there any assurance that the school will support the anticipated change and improvement, should it occur?	-	-	-
1	2	3	4	5	4. Did the overall plan for the inservice event provide an integration of work, education, and leisure?	-	-	-
					5. Did planners of the inservice training work as colleagues with the users in:			
1	2	3	4	5	(a) identification of needs	-	-	-
1	2	3	4	5	(b) the planning of the training	-	-	-
1	2	3	4	5	(c) the continuous tailoring of the activities to fit teachers' needs?	-	-	-
1	2	3	4	5	6. Was the inservice program planned with intact groups?	-	-	-
					7. Did the inservice activities promote:			
1	2	3	4	5	(a) awareness	-	-	-
1	2	3	4	5	(b) knowledge and conceptualization	-	-	-
1	2	3	4	5	(c) skill training	-	-	-
1	2	3	4	5	(d) planning for transfer?	-	-	-
					8. Did the inservice program provide skill training that incorporated:			
1	2	3	4	5	(a) presentation and discussion of theory (knowledge and conceptualization)	-	-	-
1	2	3	4	5	(b) demonstration or modelling	-	-	-
1	2	3	4	5	(c) practice	-	-	-
1	2	3	4	5	(d) practice with feedback?	-	-	-
1	2				9. Was there any assurance that continued emotional support and on-site coaching would be available at the school following the			
1	2	3	4	5	inservice education activity?	-	-	-
					10. Did the inservice efforts provide an opportunity for teachers to grow			
1	2	3	4	5	(a) professionally	-	-	-
1	2	3	4	5	(b) personally?	-	-	-
1	2	3	4	5	11. Did the inservice activities allow teachers to interact by sharing and assisting each other?	-	-	-
1	2	3	4	5	12. Did the inservice allow for individual differences in participating adults?	-	-	-

EXTRACURRICULAR ACTIVITIES FACT SHEET

1. Activity: _____
2. Supervisor: _____
3. Goals and objectives of the activity (list in order of priority):
   a. _____
   b. _____
   c. _____
   d. _____
4. Is any fee charged for participation in activities? _____
   Amount _____
5. Ages/grades of student participants: _____
6. Number of participants: Male: _____ Female: _____
7. Meeting place: _____
8. Meeting time: _____
9. Specific activities with which the group has been involved:
   a. _____
   b. _____
10. What costs are involved in running the group? Total _____
    Specific expenditures (a) _____ (b) _____ (c) _____
11. In what ways is the group meeting its objectives?
    a. _____
    b. _____
    c. _____
12. Are difficulties encountered in meeting certain objectives? _____
    Which ones? _____
    Why? a. _____
    b. _____
    c. _____

Software Evaluation

Name of program: _____
Author/programmer: _____
Copyright date: _____
Subject area: _____
Grade level: _____
Brief description: _____
_____

Company: _____
Address: _____
_____
Phone: _____ Price: _____

Check the following:

Type of software

___ Simulation
___ Demonstration
___ Teacher management
___ Tutorial
___ Review
___ Interfacing
___ Word processing
___ Data base
___ Other (Specify: _____
_____)

General

___ Teacher dependent
___ Support materials

For use by:

___ Individual
___ Group
___ Class

Student reaction:

_____
_____

Recommended uses:

_____
_____
_____

Processes of science

___ Recalling
___ Observing
___ Interpreting
___ Communicating
___ Comparing
___ Measuring
___ Organizing
___ Classifying
___ Relating
___ Questioning
___ Hypothesizing
___ Problem solving
___ Inferring
___ Generalizing
___ Inventing
___ Creating
___ Other (Specify: _____
_____)

Hardware required

Computer: _____
Disk drives: ___ 1 ___ 2 ___ Tape recorder
Memory required: ___ K
Printer: _____
Other: _____

Mechanics of program

___ Color required ___ Graphics ___ Sound
___ Save progress Required time: _____

Instruction and presentation

Rate 1 to 5 (5 = excellent; 1 = poor)

___ Clarity of directions
___ Ease of operation
___ Error handling
___ Graphics
___ Sound
___ Readability of text and graphics
___ Motivation
___ Student materials
___ Appropriate use of technology
___ Interaction with user
___ Evaluation and feedback
___ Logic of sequence
___ Promotion of thinking skills
___ Return value
___ Documentation

___ Recommended ___ Not recommended (Reasons: _____
_____)

Evaluator: _____ Position: _____ Site: _____ Date: _____

Karen E. Reynolds, Emma Walton, and Terry Logue

STRUCTURED INTERVIEW FOR TEACHERS/IN-SCHOOL ADMINISTRATORS*

(In this example, "program" means class activities, the text used, other learning materials. i.e.. how the curriculum is offered and delivered.)

1. Explain **how instruction is modified** in the classroom to meet individual needs of students.

2. Explain how the **philosophy** of the _____ program meets **the objectives** of the curriculum.

3. Describe how the **activities** within the program meet the **objectives** of the curriculum.

4. Do you have adequate **supplementary resources** and **activities** to facilitate the program? Describe how these supplementary resources and activities **are used** in the program.

*Swift Current School Division

10. Describe your perceptions of how **fellow staff members** and **administration** feel about the program.

11. Describe your **procedures in evaluating** students and reporting to parents.

12. Describe **indicators** that give evidence of student learning as a result of the program.

13. Describe your **feelings about** each of the following program features:

    a) **time allocation**

SELECTED NORM-REFERENCED TESTS

Instructions: In each space place a number corresponding to your evaluation.

YES - 3 NOT SURE - 2 NO - 1

A comparison of the numbers should indicate which test appears to be most appropriate and which tests require more study before a final decision can be made.

Criteria	Instrument 1 Name _____	Instrument 2 Name _____	Instrument 3 Name _____
1. Is the instrument a valid measure? (see page 7.4)			
2. Is the instrument a reliable measure? (see page 7.3)			
3. Is the instrument appropriate to use on the population to be assessed?			
4. Does the instrument yield objective data?			
5. Is the instrument easy to administer and score, requiring minimum time and resources?			
6. Is the administration of the instrument nondisruptive to classroom learning activities?			
7. Will the instrument provide data which are useful for decision-making at both the classroom level and the program/administrative level?			
8. Is the cost of the instrument reasonable and within budgetary constraints?			